

Identifying Feed and Seed Stores as a Site to Promote Skin Cancer Control: A Social Marketing Approach to Agricultural Health Communication

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Abstract

Four principles of social marketing—product, price, promotion, and place—were applied in efforts to select goals, message elements, and locations to communicate to Georgia farmers about skin cancer prevention and detection. A representative sample of Georgia farmers (N = 448) responded to a telephone survey which evaluated their performance of skin cancer control behaviors, the “product” to be promoted in Georgia’s Harvesting Healthy Habits program. It was found that farmers lacked important knowledge about skin cancer prevention and detection practices, and had personal and physical barriers likely to inhibit performance of the practices. Despite these barriers to performance, farmers were confident about their ability to detect skin cancer, although they held reservations about being able to practice prevention. These issues should be addressed in the design of messages to promote skin cancer control to Georgia farmers. Respondents also reinforced previous formative evaluation research, demonstrating that farmers seldom received information to encourage, or “promote,” skin cancer control, even from health care providers. When Georgia farmers did receive skin cancer prevention and detection information, they were more likely to adopt the product of skin cancer control. Further, the site where most Georgia farmers were likely to be available to receive such promotion was feed and seed stores, a location not previously identified for this purpose.

Keywords. Health communication, Social marketing, Farmers, Skin cancer.

The field of marketing, which grew out of the discipline of economics, originally had little or no regard for social outcomes attributed to its activities (Choudbury, 1974). During the 1970s, however, marketers came under sharp criticism for failure to be socially responsible, with one critic asserting that “marketing must assume the moral burden. Failure to do so erodes marketing’s long-run usefulness to society and implicitly threatens the well-being of individual consumers” (Feldman, 1971, p. 56). As a result, a number of individuals turned to using marketing strategies to achieve social change, giving rise to techniques labeled social marketing (Kotler and Zaltman, 1971). The four principles which guide social

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marketing activities—product, price, promotion, and place (Wallack and Dorfman, 1993)—were applied in efforts to select goals, message elements, and locations to communicate to Georgia farmers about skin cancer prevention and detection.

Product: Farmers' Skin Cancer Control Behaviors

From a social marketing perspective, the product “refers to something the consumer must accept: an item, a behavior, or an idea” (Wallack and Dorfman, 1993, p. 22). Research has previously established the higher incidence of some types of cancer among agricultural populations as compared to other occupational groups, with a number of studies of nonmelanoma skin cancer (NMSC) death in farmers finding farmers to have an elevated relative risk (Blair et al., 1985; Delzell and Grufferman, 1985; Fincham et al., 1992). The evidence of increased skin cancer incidence and mortality among farmers has been demonstrated, and the increased risk for exposure to solar radiation, a known cause of skin cancer, is obvious. Research has also demonstrated that farmers perceive themselves to be at increased risk, yet they seldom adopt behaviors to prevent or detect skin cancer (Marlenga, 1995; Parrott et al., 1996; Reding et al., 1995). One goal of this study was to assess Georgia farmers' skin cancer control practices, the “product” of interest.

Price: Farmers' Skin Cancer Control Knowledge, Outcome Expectations, and Self-efficacy

To increase farmers' acceptance of skin cancer control behaviors, our social marketing approach acknowledged the need to consider the costs associated with these behaviors, with price referring to “psychological, social, economic, or convenience costs associated with message compliance” (Wallack and Dorfman, 1993, p. 22). The theory which underlies Georgia's Harvesting Healthy Habits project, social cognitive theory, posits that an individual's health behavior depends upon the reciprocal influence of environment and such personal variables as knowledge, outcome expectancies, and self-efficacy on behavior (Bandura, 1986). Formative evaluation research conducted in Georgia to gain insights about the barriers to farmers' cancer control behaviors demonstrated that most of the 122 farmers surveyed did not know what SPF number to select when purchasing sunscreen or what type of hat provided the most sun protection (Parrott et al., 1996). Moreover, Lee et al. (1992) found that Wisconsin farmers' expectancies relating to the appearance, comfort, cost, and practicality of hats in relation to weather and farm maneuvers affected likelihood of use, regardless of the hats' sun protective value. The expectation that a hat will be uncomfortable or will not stay on one's head while working in the sun, for example, is likely to inhibit a farmer's self-efficacy, or confidence that he will be able to behave in the recommended fashion (Bandura, 1986). A second aim of this study was to assess the costs and benefits, or “price,” that Georgia farmers associated with skin cancer control behaviors.

Promotion: Messages about Skin Cancer Control and Farming

The principle of promotion within social marketing addresses how best to communicate about a product in light of the costs associated with it, asserting the

need to design messages which “compensate for costs” by providing “the benefits of adopting this behavior” (Wallack and Dorfman, 1993, p. 22). For farmers, one problem associated with societal messages about skin cancer prevention is that the emphasis is placed on: (1) avoiding the sun; and/or (2) fun in the sun. Farmers cannot avoid exposure to the sun and accomplish their work, and their exposure is associated with occupation rather than recreation. In the absence of appropriate media messages, farmers might receive information about skin cancer prevention and detection from health care providers, but formative evaluation research determined that only six percent of the 122 participating farmers had ever had a physician recommend these activities (Parrott et al., 1996). Another purpose for this study was to assess the validity of this formative evaluation research finding by asking Georgia farmers to report about the availability of skin cancer control “promotion” messages from various sources.

Place: Situations Where Farmers are Available to Receive Skin Cancer Control Information and Products

The fourth principle within a social marketing approach to health communication gives prominence to place, which “refers to the availability of the product or behavior” (Wallack and Dorfman, 1993, p. 22). Little previous research examined individuals’ actual access to skin cancer control information and resources (e.g., Marlenga, 1995; Reding et al., 1995). The initial formative evaluation study in Georgia included field observation of locations where skin cancer information and resources might be expected to be readily available, such as health clinics and libraries (Parrott et al., 1996). However, little or no information or resources was found to be available to promote skin cancer control (Parrott et al., 1996). Beyond the locations where such information would be expected to be available, one may want to consider novel sites where a target audience’s presence provides an opportunity to promote a product. The prominence of the feed and seed industry in agriculture is clear in view of the billions of dollars earned annually (see Rogers et al., 1988). This may suggest that farmers are likely to visit feed and seed stores to conduct farm business, although the specific number of visits to feed and seed stores per year for Georgia farmers is not known. As locations where farmers may spend time, feed and seed stores could be a “place” to promote skin cancer prevention to farmers. The field observation component of Georgia’s formative evaluation research showed that the twelve feed and seed stores observed displayed many messages with agricultural health and safety content. These generally referred to injury prevention when using farm tools and implements, with some focus on the effects of agrichemicals (Parrott et al., 1996). Another aim of the present study was to assess the potential for this “place” as a location to disseminate health promotion materials from the perspective of Georgia farmers’ reports about their presence in these sites.

Methods

Participants and Procedures

The goal of the present study was to apply the four principles of a social marketing approach to the design of agricultural health communication through the analysis of a representative sample of Georgia farmers. Using a simple random selection method, farmers’ names were selected from a list of farm operators

provided by the University of Georgia's Cooperative Extension Service and county agricultural extension field agents (see Parrott, Monahan, Ainsworth, and Steiner, 1998). Farmers responded to a telephone survey addressing skin cancer prevention and detection.

Data Collection

Farmers surveyed were asked closed response questions with regard to skin cancer prevention and detection. Questions that assessed frequency of behavior or frequency of exposure to skin cancer control messages asked farmers to respond: never, seldom, sometimes, frequently, or always to indicate how often they performed the practices, or received skin cancer information from the named sources. Farmers were told that if they always performed a behavior when working in the sun, to so indicate; if they usually performed the practice but not always, to indicate the frequently response, and so on. Farmers were also told to consider what they knew about skin cancer and from what source they had received the information, then assess how often the information had come from the various sources. Thus, if all of their information about skin cancer had come from the media, they were to indicate they always received information about skin cancer from the media. If most of what they knew about skin cancer came from the media, then they should indicate "frequently" in response to a question asking about the media as a source of skin cancer information, and so on.

Barriers and outcome expectancies were assessed with five-point Likert scales, with responses ranging from strongly disagree to strongly agree. Knowledge questions were asked in a multiple choice fashion, including a response for "don't know."

Product: Farmers' skin cancer control behaviors. Farmers were asked how often they: (1) perform skin self-exams; (2) obtain an annual clinical skin exam; (3) wear sunscreen when working in the sun; (4) wear a sun protective hat when working in the sun; and (5) wear a long-sleeved shirt when working in the sun.

Price: Farmers' skin cancer knowledge, outcome expectancies, and self-efficacy. With regard to knowledge about skin cancer, farmers were asked: (1) how often should you conduct a skin self-exam to help detect signs of skin cancer; (2) how long should you wait after applying sunscreen before going into the sun; (3) which hat provides the best sun protection; (4) how often should you get a clinical skin exam; (5) what is the best type of material for a sun protective shirt; and (6) what does the sunscreen SPF number mean.

A personal barrier to the performance of skin cancer control behaviors was assessed by asking how often do you forget: (1) to conduct a skin self-exam; (2) to get a clinical skin exam; (3) to put on sunscreen before working in the sun; (4) to put on a sun protective hat before working in the sun; and (5) to wear a long-sleeved shirt when working in the sun.

For outcome expectancies, farmers were asked to indicate their level of agreement with statements that: (1) conducting an exam of my own skin is physically uncomfortable; (2) getting a clinical skin exam causes physical discomfort; (3) wearing sunscreen irritates my skin; (4) wearing a sun protective hat makes me hot; and (5) wearing a long-sleeved shirt makes me hot.

Farmers' perceptions of self-efficacy with regard to skin cancer control were assessed by asking farmers how difficult is it: (1) to conduct an exam of their own skin; (2) to get an annual clinical skin exam; (3) to wear sunscreen when working in the sun; (4) to wear a sun protective hat when working in the sun; and (5) to wear a long-sleeved shirt when working in the sun.

Promotion: Exposure to messages about skin cancer control and farming. To assess farmers' exposure to sources of skin cancer prevention and detection messages, farmers were asked how often they received such information from: (1) the media; (2) family members; (3) retailers; (4) extension agents; and (5) medical professionals.

Place: Locations and situations where farmers are available to receive skin cancer control information and products. To assess the places where farmers are available to receive skin cancer control information and products, farmers were asked how often do you: (1) go to a feed and seed store; (2) listen to the radio; (3) talk to an extension agent; and (4) visit the local farm bureau.

Results

Of the 777 farmers contacted, 461 were interviewed (a 59% response rate); subsequently, 13 surveys were deemed to be incomplete, with an effective response rate of 58%. All respondents were male, with the average age being 50 years old ($SD = 12.66$); most were married (90.2%). Their farming experience ranged from 1 to 81 years, with an average of 37.5 years ($SD = 16.14$). Just over one-third (36.4%) of the participants operated their own farms, reporting themselves to be the only worker, and about half (42.6%) indicated that farming comprised 75% or more of their incomes. Although most (84.5%) indicated that they had never had skin cancer, 15.4% indicated that they had had skin cancer, a seemingly high percentage. Less than half (43.6%), however, had ever had their skin examined by a physician to check for cancer.

Product: Farmers' skin cancer control behaviors. As summarized in table 1, findings reveal room for improvement in farmers' skin cancer detection behaviors. With regard to prevention, results are quite similar, revealing little use of sunscreen, somewhat greater use of a sun protective hat and long-sleeved shirt to work in the sun.

Price: Farmers' skin cancer knowledge, outcome expectancies, and self-efficacy. Less than one-third of the farmers accurately indicated how often one should perform a skin self-exam (table 2). Even fewer respondents were aware of the need to apply sunscreen 20-30 min before going into the sun in order for it to be most effective (15.4%). The majority of the farmers selected a wide-brimmed straw hat as the best sun protection (72.6%), rather than the more protective tightly woven wide-brimmed cloth hat with neck and ear flap (21.7%). Most knew that they should obtain an annual clinical skin exam (54.9%), but were confused about the best type of material for a sun protective shirt. Almost as many (41.1%) stated that a loose fitting and loosely woven shirt would be sun protective, as stated (45.3%) the more protective loose fitting and tightly woven shirt. While a little less than half of the farmers surveyed (47.8%) accurately indicated that a sunscreen's SPF number indicates how long one is protected while in the sun, nearly as many of the respondents (49.1%) indicated that they did not know what an SPF number means.

Table 1. Product: Farmers' (N = 448) acceptance of skin cancer control behaviors

	Never (%)	Seldom (%)	Sometimes (%)	Frequently (%)	Always (%)
Perform skin self-exams	29.0	19.6	15.4	20.3	14.0
Obtain clinical skin exam	52.0	19.6	14.1	9.8	3.6
Wear sunscreen	62.9	15.0	7.8	5.1	9.2
Wear sun hat	33.9	10.9	10.9	10.0	34.2
Wear long-sleeved shirt	35.9	22.8	17.9	7.6	15.4

Table 2. Price: Farmers' (N = 448) knowledge relating to skin cancer control*

1. How often should one conduct a skin self-exam? (Should be conducted monthly.)	With every shower: 49.3% / <u>Once a month: 27.5%</u> / Once a year: 8.0% / Don't know: 15.2%
2. How long before going out in the sun should you apply sunscreen for it to be most effective?	<u>20-30 min before: 15.4%</u> / Just before: 28.1% / 10 min before: 24.1% / Don't know: 32.4%
3. Which of the following types of hats provides the best protection from the sun?	Wide-brimmed straw hat: 72.6% / Baseball cap: 1.1% / <u>Tightly woven wide-brimmed cloth hat with neck flap: 21.7%</u> / Don't know: 4.5%
4. How often should you get a clinical exam of your skin to help detect skin cancer?	Only if you detect a change in your skin: 29.5% / Once every five years: 3.8% / <u>Once a year: 54.9%</u> / Don't know: 11.8%
5. What type of material should you look for when selecting a protective shirt to wear while working in the sun?	<u>Loosely fitting and tightly woven: 45.3%</u> / Tightly fitting and tightly woven: 1.3% / Loosely fitting and loosely woven: 41.1% / Don't know: 12.3%
6. What does the SPF number on sunscreen mean?	How long you are protected from the sun: 47.8% / How many minutes before going into the sun you must apply it: 3.1% / Don't know 49.1%

* Correct responses are underlined.

Results suggest that the interviewed farmers often (48.4%) forget to conduct skin self-exams or obtain annual clinical skin exams to detect skin cancer (table 3). Just over one half (52.1%) strongly agreed or agreed that they forget to wear sunscreen, and about one-third forget to put on a sun protective hat (32%) or long-sleeved shirt (34.6%) to work in the sun.

With respect to outcome expectancies, as seen in table 3, of the 448 farmers surveyed, 12.9% strongly agreed or agreed with the statement "conducting an exam of my own skin is physically uncomfortable," with even fewer (8.2%) strongly agreeing or agreeing that clinical exams caused physical discomfort. About one-fifth

Table 3. Price: Farmers' (N = 448) barriers and outcome expectancies relating to skin cancer

	Strongly Agree (%)	Agree (%)	Neither (%)	Disagree (%)	Strongly Disagree (%)
Forget to:					
Conduct skin exam	2.7	45.7	12.4	32.6	6.6
Obtain clinical exam	1.2	39.3	16.9	37.1	5.5
Put on sunscreen	3.4	48.7	17.8	26.9	3.2
Put on a sun hat	1.6	30.4	11.0	48.8	8.2
Wear long-sleeved shirt	2.1	32.5	17.5	39.6	8.3
Skin exams are physically uncomfortable.	2.1	10.8	7.7	71.4	8.0
Clinical skin exams cause physical discomfort.	1.1	7.1	9.0	77.8	5.0
Wearing sunscreen irritates my skin.	1.6	16.8	14.4	61.0	6.2
Wearing a sun hat makes me hot.	3.8	22.9	7.5	59.2	6.6
Wearing a long-sleeved shirt makes me hot.	10.3	54.9	6.2	24.0	4.6

Table 4. Price: Farmers' (N = 448) self-efficacy relating to skin cancer control

	Very Easy (%)	Easy (%)	Neither (%)	Difficult (%)	Very Difficult (%)
How difficult is:					
Conducting an exam of your skin?	12.9	66.3	10.8	9.0	1.0
Getting a clinical skin exam?	10.6	64.8	11.3	10.6	2.7
Wearing sunscreen?	9.8	39.3	12.9	26.0	12.1
Wearing a sun protective hat?	18.3	49.2	9.6	19.9	3.0
Wearing a long-sleeved shirt?	9.9	39.3	10.4	33.3	7.2

(18.4%) perceived sunscreen to irritate their skin, 26.7% reported that wearing a sun protective hat made them hot, and a large majority (65.2%) found wearing a long-sleeved shirt to work in the sun made them hot.

Perceptions of self-efficacy with regard to skin cancer control are summarized in table 4. Only 10% of the farmers regarded conducting an exam of their own skin to be difficult or very difficult, and just 13.3% perceived having an annual clinical skin exam to be difficult. Wearing sunscreen when working in the sun, on the other hand, was viewed as very difficult or difficult by over one-third (38.1%) of the sample. Wearing a sun protective hat when working in the sun was viewed as very difficult or difficult by nearly one-fourth (22.9%) of the farmers. Wearing a long-sleeved shirt when working in the sun was viewed as very difficult or difficult by more than one-third (40.5%) of the farmers.

Promotion: Exposure to messages about skin cancer control and farming. As summarized in table 5, over half (61.2%) of the farmers surveyed reported that the media had been a source of skin cancer information sometimes, frequently, or always. Over one-third (39.7%) had received information about skin cancer prevention and detection from family members sometimes, frequently, or always. Farmers reported that retailers hardly ever (8.8%) provided skin cancer information, despite the fact that such messages could well be associated with the purchase of particular products. Extension agents, too, only infrequently provided skin cancer control information to farmers (8.4%), and medical professionals fared little better, with nearly half (47.3%) of the respondents indicating that they had never received such information from a medical professional.

Table 6 provides an overview of the relationships between farmers' performance of skin cancer prevention and detection behaviors, and the receipt of messages promoting these practices. When a doctor or family member promoted such practices, there was an increased association with engaging in all of the self-protective behaviors. Promotion by extension agents was associated with an increased likelihood of wearing a hat. Promotion by retailers was associated with an increased likelihood of wearing sunscreen. Media messages were associated with increased performance of skin exams, and the use of sunscreen. Thus, clearly the "promotion" component impacts acceptance of the "product," as illustrated in table 5.

Table 5. Promotion: Farmers' (N = 448) exposure to skin cancer control messages

	Never (%)	Seldom (%)	Sometimes (%)	Frequently (%)	Always (%)
Media	12.1	22.8	35.5	25.0	2.7
Family members	38.6	21.2	19.6	16.1	4.0
Retailers	71.4	19.4	6.3	2.5	0.0
Extension agents	73.9	15.6	7.1	1.3	0.0
Medical professionals	47.3	24.8	13.8	0.0	2.9

Table 6. Product and promotion: Pearson Correlation Coefficients relating farmers' practices to messages received about skin cancer control

	Medical	Extension	Retailer	Family	Media
Perform skin self-exams	0.27**	0.04	0.05	0.21**	0.19**
Obtain clinical skin exam	0.43**	0.05	0.06	0.25**	0.11*
Wear sunscreen	0.29**	0.05	0.10*	0.27**	0.13*
Wear sun hat	0.14*	0.12*	0.05	0.11*	0.04
Wear long-sleeved shirt	0.21**	0.07	0.03	0.10*	0.05

** p < 0.001.

* p < 0.05.

Table 7. Place: Locations and situations where farmers are available to receive skin cancer control information and products

	Never (%)	Seldom (%)	Sometimes (%)	Frequently (%)	Always (%)
How often do you:					
Visit a feed and seed store?	1.1	7.8	15.8	55.4	19.0
Listen to the radio?	2.7	13.2	10.5	35.9	37.5
Talk to an extension agent?	3.1	38.6	30.1	24.3	3.6
Visit the local farm bureau?	22.8	38.4	23.4	12.7	1.8

Place: Locations and situations where farmers are available to receive skin cancer control information and products. As summarized in table 7, when asked how often they go to a feed and seed store, nearly three-fourths (74.4%) responded frequently or always. A similar percentage (73.4%) of respondents said that they frequently or always listen to the radio. Far fewer talked to extension agents (27.9%) with any regularity, or visited their local farm bureau (14.5%).

Conclusion

The results of this study confirm that this sample of Georgia farmers too seldom practiced the behaviors necessary to prevent or detect skin cancer, the “product” in this study. This finding supports previous formative evaluation research based on a small convenience sample of Georgia farmers (Parrott et al., 1996). The failure to adopt the practices associated with skin cancer prevention and detection could be due to an absence of understanding about the practices, as demonstrated by Georgia farmers' low knowledge levels regarding sun protective clothing, sunscreen use, and skin detection actions. Also, farmers' forgetfulness emerged as an important issue to be considered in the design of messages aimed at increasing skin cancer prevention and detection, with nearly half of the farmers surveyed indicating that they forget to conduct skin self-exams or wear sunscreen, while more than one-third forget to obtain clinical skin exams, and about one-third forget to wear a sun protective hat or shirt. Physical discomfort also may have inhibited prevention practices, particularly in the case of wearing long-sleeved shirts. And, a further barrier to performance was identified with regard to farmers' self-efficacy perceptions regarding skin cancer prevention, for about one-third expressed difficulties applying sunscreen. Farmers reported even greater difficulty wearing a long-sleeved shirt while working out in the sun. In sum, it appears that Georgia farmers in this sample failed to adopt the “product” — skin cancer control practices, because they forgot to behave in the prescribed fashion, found it physically uncomfortable or difficult to do so, and/or lacked adequate levels of knowledge to overcome the difficulties associated with sun

protection. These issues should be addressed in messages designed to promote the product to Georgia farmers.

The results of this baseline survey of a large representative sample of Georgia farmers provide not only insights about farmers' failure to adopt skin cancer prevention and detection practices, and their lack of adequate levels of knowledge and confidence to perform the behaviors, but a possible explanation for why farmers lack adequate knowledge and forget to behave in the prescribed fashion. Far too few farmers appear to be recipients of "promotion" messages relating to skin cancer prevention and detection, likely contributing to their forgetfulness, and lack of knowledge and confidence regarding this issue. General media messages relating to skin cancer prevention and detection may be available, but farmers may fail to pay attention to them because they do not specifically relate to or address farmers' lifestyle and needs. As demonstrated by the study's findings, when farmers did receive such messages, they were more likely to practice skin cancer prevention and detection. Messages from health care providers and family members were even more likely to be heeded. However, it appears these farmers seldom visited the doctor, a finding suggested by the few who had ever had clinical skin exams, and their family members apparently also lack the knowledge and confidence to promote skin cancer prevention and detection, since they did not promote these health behaviors to the farmers. Thus, health care providers and family members were unlikely to enhance farmers' self-protective behavior. A critical challenge facing those who would "promote" this "product" to Georgia farmers is where to "place" such messages, so that farmers receive them with enough frequency to increase the likelihood that they will remember to protect themselves while working in the sun, gain adequate understanding about how to protect themselves, and feel confident about their ability to do so.

It might be predicted that farmers would receive promotions about skin cancer control from agricultural extension agents, but this study suggests that even if the agents increased their promotion efforts, they are seldom available to help reduce farmers' forgetfulness. This may be due to a cut in funding for Georgia's agricultural extension program, and a reduction in the number of field agents available to interact with farmers. Skin cancer prevention messages could come from the local farm bureau, but this study suggests that Georgia farmers do not often visit the farm bureau. What is needed is a consistent "place" for promoting skin cancer control to farmers. The one "place" that was identified in this study as a location where most Georgia farmers visit is the local feed and seed store. Thus, as a method to reduce farmers' forgetfulness, while enhancing their knowledge levels, addressing barriers to performance, and increasing feelings of confidence, placing health promotion messages in feed and seed stores holds great promise.

This baseline study has some limitations associated with it that others attempting to apply a social marketing approach to agricultural health communication should consider. The Georgia farmers in this study's sample identified how often they are exposed to particular sources or venues where they might receive skin cancer information. The scale used indicated relative frequency, with responses ranging from "never" to "always." A farmer's response provides a relative estimate of how often they visit a feed and seed store, listen to the radio, talk to an extension agent, and visit the local farm bureau, with answers providing the means to compare these frequencies. Thus, although we are able to ascertain that farmers are more likely to visit a feed and seed store than they are to visit the local farm bureau, and more likely to listen to the radio than to interact with an extension agent, this study does not tell us if farmers visit feed and seed stores or talk to extension agents weekly,

monthly, bi-monthly, or at some other periodic interval. The latter would provide an indicator of exactly how often farmers would be likely to be exposed to messages if placed in a feed and seed store. Similarly, this study does not specifically indicate how often this sample of Georgia farmers interact with family members, retailers, or medical professionals, or how often they use media and which types of media are used. Some of these sources may provide skin cancer information, but if farmers never interact with them, the farmers will never receive the information. Nonetheless, the findings do convey this sample of Georgia farmers' likelihood of availability to receive skin cancer information in particular places and from particular sources more often than others.

This study has identified feed and seed stores as a promising location, the most relevant content for messages promoting skin cancer control to Georgia farmers, and the need for such promotion as a method to increase adoption of the product. Now an intervention may be designed which increases the likelihood that promotion will reach Georgia farmers in a place where they are available to reap the benefits.

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