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# Equipment Dealers' Perceptions of a Community-based Rollover Protective Structures Promotion Campaign

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**ABSTRACT:** Farming is one of the most hazardous occupations, and tractor overturns are the leading cause of agricultural fatalities. This article examines a community-based injury intervention designed to increase the number of rollover protective structures (ROPS) and seat belts on tractors and to promote safe operation of farm tractors in two counties. Equipment dealers who sell retrofit ROPS kits to farmers were a critical component of the intervention. Interviews were conducted with dealers after the 31-month intervention period to understand their perceptions, any difficulties they experienced as a result of the project and how a similar project could be improved. Comments were analyzed in relation to theories of persuasion. Results indicated that dealers believed the intervention was successful in producing behavior change among some farmers. Dealers also provided important insights into why some farmers continued to resist retrofitting tractors with ROPS. Recommendations are offered for designers of community-based interventions beyond the ROPS project described here.

**O**f all occupations, farming is second only to truck driving in the number of occupational fatalities each year in the United States (Bureau of Labor Statistics, 2000). The leading cause of these deaths is agricultural machinery, primarily the farm tractor (National Safety Council, 1999). In Kentucky, most of these cases are due to overturns (Centers for Disease Control [CDC], 1995).

To address the dangers involved with farm tractors, a multicomunity, multichannel intervention was developed. The Kentucky Community Partners for Healthy Farming (CPHF) Project was a three-year agricultural injury intervention initiative funded by the National Institute for Occupational Safety and Health (NIOSH). This community trial project was designed

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to increase the number of rollover protective structures (ROPS) and seat belts on tractors and to promote safe tractor operation in two counties.

ROPS promotion was selected as the focus of the intervention because extensive surveillance data from Kentucky revealed that the incidence of tractor overturn fatalities was disproportionately high relative to overall U.S. rates and because retrofitting farm tractors with ROPS is a proven method for reducing fatalities and injuries (CDC, 1995; Struttman, 1998). Further, certified ROPS retrofits were available at a reasonable cost for most farm tractors. The principal barrier to adoption, aside from cost, appeared to be lack of awareness about (or belief in) ROPS.

The CPHF Project used a multifaceted intervention approach that included as change agents equipment dealers, agribusiness, media, health care providers, schools, rural electric cooperatives, local employers, insurance companies and others. Community leaders and representatives from these groups were involved in developing materials during the first year. Through the guidance of project staff, the official campaign materials were grounded in social science theory. These included cognitive learning theory and instructional design using graphic, concrete, and symbolic presentation of injury risks, consequences and injury prevention strategies. Also included was mass communication message design using narrative, social learning and message framing (gain and loss) theories. In the second year, the focus was on disseminating these materials and messages. Material formats included mailing, billing and check stuffers distributed by businesses and local employers, radio public service announcements, posters for public display, interactive skits and demonstrations, simulation exercises, group activities and a "how to get a ROPS" brochure. Articles written by project staff and local reporters were published in local newspapers, newsletters and magazines. The mass communication of scores of newspaper stories and thousands of radio broadcasts of 80 public service announcement messages played an important role in the campaign. The final year (1999) was devoted to evaluating and revising the materials.

The two intervention counties were randomly selected to participate from among nine counties in which there was an existing Occupational Health Nurses in Agricultural Communities (OHNAC) infrastructure (Note 1). The intervention counties were typical with respect to other farm production counties statewide.

Because equipment dealers played a major role in promoting ROPS and seat belts during the 31-month intervention period, the purpose of this qualitative

study was to assess the dealers' perspective on the project's impact, to identify barriers and to gather information that would assist in implementation of similar community-based intervention projects. Only one other qualitative evaluation study of equipment dealer interviews following a ROPS intervention was found in the literature (Lehtola, 1996), but that initiative involved a dealership-based campaign rather than a larger community-wide campaign. This study, therefore, provides important information on the ways in which local dealers can become an integral part of a community-wide agricultural safety campaign. Not only are dealers an important means of accomplishing campaign objectives, they are able to provide important insights into the perceptions of the farming community.

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## Methods

Individual interviews were conducted in September and October 1999 with 9 of the 10 equipment dealers in the two intervention counties. One key representative from each dealership was interviewed. The one nonparticipating dealership had changed its business concentration during the project period from farm machinery to backhoes and other earth-moving equipment. This dealer did not sell any ROPS during the intervention period.

An interview guide was developed and reviewed by the research team prior to the first interview. It consisted of 14 open-ended questions that allowed respondents to add content within the protocol established by the research team. Questions were grouped around four primary themes: general feelings, attitudes and opinions about the project's impact, specific obstacles dealers were confronted with as a result of the campaign, reasons why farmers did not purchase ROPS and, finally, how a ROPS retrofit campaign could be improved. Interviews lasted 15 to 50 minutes and were tape recorded. Neutral probes were used to follow up on questions to gain additional depth in specific areas or to clarify points. Notes also were taken during some interviews to record nonverbal behaviors relevant to the issues being discussed. Confidentiality was maintained to protect the businesses, and the tapes were later destroyed.

The premise for analysis was one of ethnomethodology (Feldman, 1995) where we assumed statements made were true and as they appeared sans connotations other than direct meaning. During analysis, themes were taken from the interview guide and sub-

**Table 1. Program Impact (Selected Responses From Dealer Interviews).**

General responses to the program	<p>"It was a very worthwhile project."</p> <p>"A lot of time and effort was put forth to get these tractors equipped with ROPS." [confirming community involvement]</p> <p>"I don't believe it hurt our business any and really it didn't help it other than just a little PR."</p>
Lives saved	<p>"It's a great program, if you just save one person it'd be worth it all."</p> <p>"With 62 ROPS that was sold in the two counties, it's a good possibility there's 62 people that'll be survivors."</p>
Community awareness	<p>"It's making people more aware. I think there was a lot of people who really never thought anything about the ROPS 'til this program came along."</p> <p>"I don't think anybody would have brought 'em if you hadn't had the program going, 'cause the dealers . . . wouldn't have been pushing them 'cause there's no profit in 'em."</p> <p>"Prior to two years ago you didn't have anybody concerned about ROPS."</p>
Dealer attitudes and behavior changes	<p>"I know it's made me more aware."</p> <p>"I'm more conscientious about safety than I used to be."</p> <p>"When I operate the dozer or skid steer I use a seatbelt every time now."</p>

themes were generated while listening to the tapes and transcribing statements verbatim. Statements were then indexed according to their literal meaning into thematic units.

Personal interviews were chosen instead of a mail or telephone survey for several reasons. First, the project emphasized person-to-person contact from its inception. Second, personal interviews afforded the opportunity to add to the depth and scope of the interview when new areas emerged. Finally, more depth and breadth were desired than afforded by a mail or telephone survey.

## Results

In addition to presenting an overview of the major themes in the text which follows, we have summarized the comments from dealers in Table 1. Table titles reflect the overall structure of the interview and

are centered on key themes. Comments in the table are further grouped into subthemes.

Responses were generally very favorable (see Table 1). Some dealers expressed their opinions in general terms and others in terms of potential lives saved or the program impact on the farm community. Some suggested that the program had been good for business or affected their own attitudes and actions with regard to safety.

**Responses to Campaign Strategies.** To try to evaluate the saturation of the campaign, questions were asked about specific elements of the project (e.g., with probes referring to newspaper stories, radio public service announcements and displays in public settings). One dealer commented, "I got [bill, statement, paycheck] stuffers from everywhere and I was sending 'em out too." Another stated, "I've heard it on the radio and seen it in the paper quite often." The campaign may have even oversaturated the intended audience, creating negative feelings. As one dealer stated, "Many farmers said they felt they had been beat over the head with it . . . messages are pretty well everywhere." It was also noted that several of the dealerships had program materials on display the day of the interview.

Dealers also were asked if there were any problems encountered as a result of the campaign (Table 2). These included general problems related to the campaign, problems ordering and installing ROPS and whether the campaign created any problems in terms of customer relations. One unintended consequence of the newspaper articles (which were designed to put a human face on the issue of ROPS retrofits) was that some customers believed that if a farmer interviewed for an article spent \$400 on a ROPS, farmers who spent more were cheated by the equipment dealer. As one equipment dealer said, "It came out in the paper someone fit a tractor for about \$400. That hurt us 'cause farmers think, 'You're making something on us.' " The reality was that different models of tractors required different types of ROPS and costs varied.

**Dealers' Contributions and Reactions to the ROPS Retrofit Campaign.** Dealers were asked what they felt were their most significant contributions to the promotional campaign. They indicated that they believed in the purpose of the campaign and assisted by stocking, promoting and taking time to talk with farmers in an attempt to promote the effort. Dealers quickly discovered that having ROPS in stock was a vital issue in farmers' willingness to retrofit. A dealer comment-

**Table 2. Dealer Issues With ROPS Promotion  
(Selected Responses From Dealer  
Interviews).**

General issues	<p>"Don't really see any downfalls. We're all after the safety of the farmers. It's just been a struggle to get 'em to do it."</p> <p>"Extra calls and contacts we were set up to handle anyway, so the project resulted in no extra work."</p> <p>"But this is a community thing, I thought it was good for the community. And I donated it because, it being a community thing, in the long run somebody will live longer and maybe somebody will buy something from you."</p>
Ordering issues	<p>"There were some real old model tractors that ROPS were not available for."</p> <p>"Had 6 or so that could not be fitted . . . older 1950-1960's . . . used to plow tobacco."</p>
Installation issues	<p>"Puttin' 'em on is a job, in some cases it could be seven-eight hours for us. Sometimes you can slip right in there and put one on in an hour, but on the average . . . it takes 3-4 hours."</p> <p>"We were furnishing labor free, it takes about 4 hours to put a ROPS on."</p> <p>"Hard to name an installation price without first seeing the tractor."</p>
Financial issues	<p>"It creates a loss for my business." [Dealers do not mark up the ROPS.]</p> <p>"I can't keep my doors open selling them at net."</p> <p>"The manufacturer should price it including freight, we never know what the freight was gonna be."</p>
Customer relations	<p>"A delay in shipping caused a customer to get riled up once or twice."</p> <p>"We don't intend to make anything on it but the farmer feels we are."</p> <p>"They expected it to be \$200-300 dollars" [so farmer decides not to buy one].</p> <p>"Had one fella that really got upset big time 'cause I wouldn't take the roll bar off his new tractor. He even went so far as to call one of my men and try to get him to take it off on Saturday."</p>

ed, "One model fits a lot of the tractors so we keep some in stock. If a farmers says, 'What do they cost?' then finds out it has to be ordered, that will be just enough to say 'No, don't order me one' and he leaves without [buying a ROPS]." Other dealers took a more active role. "I'd ask up front a lot of people if they had ROPS protection, trying to promote." Another felt

that his personal connection with farmers allowed him to express his support for the campaign, which constituted his most valuable contribution.

Even though dealers promoted retrofitting, they expressed reluctance to install ROPS on used tractors they were selling because the added cost would discourage sales. For example, a dealer stated, "As competitive as the market is, [when] you add \$500 to \$1,000 to the [cost], you price yourself out of the market."

Dealers shared their motivation for participation in the project. They viewed the effort as not only a safety issue but a possible method to generate revenue when the tractor was owned by the customer. Dealers could promote the advantages of a canopy for sun protection (hence the ROPS necessary to support it): "If we put a canopy on the tractor it would give us an opportunity to make money." Some emphasized the higher resale value of a ROPS equipped tractor. "It's [ROPS project] made enough difference [in my business decisions] that when I'm buying used tractors, I like to see that ROPS is on there when I buy it." Tractors with ROPS become more attractive to a dealer because he can resell the unit quicker. "Today, it does make a difference . . . I'd rather that tractor had the ROPS on it because I know that it probably will sell a little bit better." However, this perceived higher value (easier resale) was less than the cost to retrofit a tractor if the tractor was owned by the dealer. Ultimately, dealers were motivated to participate because a ROPS protected future income for them. "Well, if you can get some of your farmers to put a ROPS on their tractor, odds are they're gonna be farmers that's gonna be doin' business with you in the future."

**Farmers' Positive Reactions to the Campaign.** Dealers were asked about their interactions with farmers and about farmers' perceptions of ROPS. Dealers reported farmers' perceptions of ROPS were generally favorable as a result of the campaign. "I heard a lot more positive things from farmers as the project went on." One dealer attributed the activity to one element of the campaign. "There was more response when the radio and TV ads increased." Some dealers mentioned customer confusion related to the campaign. "Most farmers didn't realize dealers sell them at their [dealer's] cost for the safety benefits." Dealers stated that farmers in the market for a used tractor are now asking about ROPS. "I have had questions from customers wanting to know if they can get ROPS for their non-ROPS tractor. Even in telephone calls about used tractors, a lot of customers are asking if they have ROPS." According to the dealers, farmers perceive the

safety and financial risk of a non-ROPS tractor may be too high: "The farmer that's concerned about ROPS is the one that's concerned about the safety of his employees . . . from the liability standpoint." Another dealer stated, "They feel the liability is getting so great, they're gonna have to get 'em on there for their employees as well as for their family members." One dealer even stated farmers' perceptions of being held liable for an injury or death of an employee using his non-ROPS equipped tractor was the sole reason farmers retrofit a tractor. "Those that buy are going to be those who are more conscious of liability."

Equipment dealers sometimes referred to specific aspects of the campaign. Often photos of overturned tractors on display at the dealerships prompted farmers to inquire about ROPS. "Farmers ask, 'That didn't happen here in the county did it?' [in reference to the photos of overturned tractors]. I respond, 'No, but it could.'" Several dealers directly attributed sales to the photo display. One commented on the visual impact of the display. "Posters with actual scenario pictures of the tractors got people's attention. I had several people looking at it." The display at the dealerships often led to discussions of ROPS between the dealer and his customer.

**Farmers' Negative Reactions to the Campaign.** Responses to the campaign by farmers were not universally positive. Some of the negative responses reported by dealers were a result of farmers not understanding that community advertising space and radio air time were donated to the campaign. "Some farmers felt like the money should be spent elsewhere and not on all the advertising that they had heard." Another stated, "They had been barraged with the message and felt that their tax money should go elsewhere." Dealers reported, "Some felt that if someone walked up and said 'Hey, I'll split the cost with you and not run so many ads,' then they would have done it," suggesting that some farmers were annoyed with the campaign and confused about the campaign support being donated.

**Reasons for Reluctance to Retrofit.** Dealers were asked about reasons why many farmers were reluctant to retrofit older tractors with ROPS. As reported by the dealers, these reasons fell into three categories: cost, inability of some barn doors to accommodate the height of the ROPS and attitude toward ROPS and farming (see Table 3). By far the leading barrier expressed by the dealer was cost. Whether resources were available or not, the value of a ROPS was less than the value of some other product or service. How-

**Table 3. Reasons Farmers Did Not Purchase a ROPS (Selected Responses From Dealer Interviews).**

Cost	<p>"Biggest barrier is the money issue."</p> <p>"Some farmers say they can't justify the cost for all their tractors. They won't spend \$700 to save their life."</p> <p>"A lot of people heard it [the messages]; they just won't spend the money."</p> <p>"They're aware of the risks, it's not that they don't have the money, it's that they won't spend it. They're saving it for something else that they think's more important."</p> <p>"He's not going to invest \$800 to \$1000 in a tractor that's worth say \$2,500 . . . because he doesn't feel like he's gonna keep that tractor."</p>
Height	<p>"Unfortunately we have some that don't want the ROPS 'cause they can't get it in their barn. Instead of fixing the barn . . . they wanna take the ROPS off."</p> <p>"Had one customer [new tractor] who wanted it taken off 'cause it wouldn't fit in the barn. We told him we absolutely couldn't do that. He had his grandson take it off."</p>
Attitude	<p>[Farmers think] "'Why should I spend money on something I never have bought before?' That's the mentality of it."</p> <p>"ROPS may cause a claustrophobic feeling."</p> <p>"They're scared of change."</p>

ever, the more fundamental obstacle was the independent attitude held by farmers and a resistance to change. One dealer explained, "A farmer, [he's] independent, he don't want nobody to tell him what to do." Another commented, "Farmers live by the seat of their pants and think, 'If it ain't broke, don't fix it.'"

When asked why some farmers do purchase a ROPS, dealers typically cited liability issues as well as the occurrence of a fatality in the community. "Bad news usually hits home the loudest; if a neighbor of somebody gets hurt, that usually causes 'em to think a little harder." When asked about the profile of farmers who responded to the campaign by purchasing a ROPS, dealers said, "Older people are more interested and aware of the problem and retrofit more often, and they are in a better financial position." Inquiries not resulting in a ROPS sale often seemed to be associated with a financial inability to make the purchase. "Part-

time farmers with children also ask about the ROPS ... most of those are in a better financial position."

**Future Campaigns.** Finally, dealers were asked how to improve a ROPS retrofit campaign. Dealers, having been skeptical at the beginning of the campaign, were willing to share insights and offer suggestions to improve the campaign. Responses were grouped into four categories: institution-based strategies, campaign ideas, message strategies and dealer actions (see Table 4).

Institution-based strategies included the involvement of insurance companies (in the form of higher premiums for farmers using non-ROPS tractors or insurance breaks for those who use ROPS-equipped tractors), obtaining grant money for ROPS retrofits and education about the importance of ROPS targeting children in schools.

Campaign ideas included creating family and community-based events designed to promote ROPS. "I'd send out a bunch of advertising. Have a little Saturday afternoon program, have hot dogs and Cokes. Have various people come in and do a whole safety program. Have it a family event." Another dealer suggested providing money to equipment sales people as an incentive to promote ROPS to customers.

Specific message strategies also were provided by equipment dealers. These suggestions included breaking down the cost over the 30-year life of a tractor, demonstrating the higher resale value of a ROPS-equipped tractor and the use of personal stories in radio public service announcements. Two dealers also suggested tying ROPS-promotion objectives to concern for the prevention of skin cancer by emphasizing that a ROPS can support a sun canopy. Another dealer suggested incorporating more graphic displays into ROPS promotional efforts, such as putting a dummy under an upside-down tractor in a dealer's parking lot.

The most compelling suggestion provided by respondents about how dealers might further contribute to a ROPS campaign was "Do a retrofit 'holiday' in the winter. All people who fit in a three-month period get a break on installation if they buy it during date and date. Do it for half labor costs, reduced labor rate. Do it along with a wintertime tractor inspection program."

The number and detail of the suggestions provided suggested dealers had contemplated the issues and their attitude had become more positive over the 31-month intervention period.

**Relationship to Social Science Theories.** Communication-based theories of persuasion offer insights into the effectiveness of some elements of the ROPS-pro-

**Table 4. Ideas for Retrofit Campaign (Selected Responses From Dealer Interviews).**

Institution-based strategies	<p>"It looks like the insurance companies could do something; Require it or offer a discount."</p> <p>"Get insurance companies involved. Hit 'em in the pocketbook with insurance premiums and requirements."</p> <p>"Get more grants to do incentives."</p>
Campaign ideas	<p>"The idea is that the buyer thinks that because the prior owner took the time and money to add a ROPS that he also took better care of his tractor, and it is therefore worth more than a similar tractor without a ROPS. It has a higher trade value."</p> <p>"Stress seat belt usage. ROPS come with a seat belt, but that don't mean you put it on."</p> <p>"Pictures are the best; still worth a thousand words."</p> <p>"Maybe have incentives for dealerships that sell ROPS. Incentive for [paid to] the guy [sales person] at the counter."</p> <p>"Attending meetings and a field day and those kinds of functions are best."</p>
Message strategies	<p>"Drive it home to the customer, 'this can happen to you.' That usually persuades 'em a little more."</p> <p>"Get it right down to dollars and cents. Show that a tractor with a roll bar has a higher resale value than one without."</p> <p>"Use personal stories on the radio."</p> <p>"Expand the scope: talk about PTOs and general equipment. Offer all info on all major implements ... safety on the farm in general ... include skin cancer, tie that to ROPS."</p> <p>"Can't beat 'em over the head with it, you gotta bring up, make your point and then move on."</p> <p>"Give the height measurement. Tell the farmer how tall it is in the ads."</p> <p>"Sun cancer and they want a canopy, need a structure to support it, use that angle to sell it."</p> <p>"Use [fatal] accidents as a sales pitch."</p>
Dealer actions	<p>"With one-on-one situation you can explain it to 'em and maybe be a little more convincing of why they need it."</p>

motion campaign, as identified by equipment dealers in the intervention counties. These theories also provide clues about the potential effectiveness of several of the specific recommendations offered by local equipment dealers.

The theory of narrative thinking (Bruner, 1986; Cole, 1997) was a key aspect of the design of nearly all of

the ROPS Project community education materials, including the mass communication message portions of the program, the stories and skits used at community meetings, and the interactive problem-solving story scenarios about tractor overturn risks, events and consequences. Preintervention surveys of a random sample of 1,648 farmers from four counties established that getting farmers to install ROPS and seat belts on their tractors was dependent in large part on changing their attitudes and values about the effectiveness of ROPS and seat belts for preventing costly injuries and major economic loss. Changing knowledge can often be accomplished by providing people with factual information and didactic instruction. But such approaches generally are ineffective or counterproductive for changing attitudes and values. Changing attitudes and values is much more likely to be achieved through nondidactic instruction that uses authentic and memorable stories about the experiences, issues and plights of people involved in giving up old ways of thinking and feeling that is necessary before a new set of beliefs and behaviors can be adopted (Bruner, 1986; Cole, 1997; Sarbin, 1986). For many farmers, putting ROPS and seat belts on tractors involves these types of changes in existing attitudes and values.

Comments from dealers speak to several key principles in persuasion theories. Prospect theory, often referred to as message framing research (Kahneman and Tversky, 1979; Meyerowitz & Chaiken, 1987; Tversky and Kahneman, 1981), along with research on the use of fear appeals (Miller, 1963; Witte, 1992) suggest emphasizing the potential for loss (e.g., what might happen if a farmer doesn't engage in the recommended behavior). Consistent with message framing research, dealers wanted to continue to use photographs of fatal incidents as a sales promotion. Included in the photo display were captions such as "It happened in a heartbeat" and "This could happen to you." A critical finding of this study was the discovery that some farmers in the intervention counties were cynical about the campaign. Some farmers complain that their tax dollars should be spent more wisely, not realizing that public service announcements are aired with donated time. Vested interest theory (Crano, 1995; Sivacek and Crano, 1982) indicates that people discount the credibility of campaigns when they believe that someone has something to gain. In the light of that theoretical perspective, there are several implications of that cynicism. Campaign messages should emphasize that air time is donated, that area businesses volunteer to disseminate message stuffers, and that local equipment dealers sell ROPS at cost. Farmers in intervention communities

might be less likely to grumble about misspent tax dollars and dismiss the messages in the campaign if they were reassured about these points.

It is also clear from complaints that some dealers and farmers believe the campaign has "hit them over the head" with ROPS-promotion messages and that some are "sick of hearing about it." Cognitive dissonance theory (Aronson, et al., 1991; Festinger, 1957; Scher and Cooper, 1989) suggests that such a reaction would be most typical of farmers who have not been able to reduce their discomfort about their decision to not purchase a ROPS. However, far from reducing the number or intensity of the campaign messages, cognitive dissonance theory would suggest that future campaign messages continue, although with increasing variety of message content. In that way, as audience members find a way to counterargue one message, a differently framed appeal is ready to be disseminated.

Ironically, some elements of the campaign actually impeded positive effects of the campaign. For example, equipment dealers pointed out that some farmers balked when they discovered that the cost of a ROPS retrofit for their particular tractor exceeded the cost cited in some of the radio public service announcements or graphic message stuffers. Expectancy violations theory (Burgoon, 1978, 1989; Burgoon & Miller, 1985) states that, when expectations are violated in a negative manner, any gains that might have been made with a persuasive message are lost. The reverse can also be true: when farmers read that a ROPS retrofit would cost approximately \$800 and they ordered a ROPS that turned out to cost just \$600, farmers were very pleased. Thus, a careful balance in campaign messages must be struck. Messages should not underestimate the cost of a ROPS retrofit because farmers may decide against a ROPS when they discover the true (higher) cost of the ROPS. On the other hand, overestimating the cost of a ROPS may exaggerate an already significant barrier to purchasing a ROPS.

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## ***Conclusions and Recommendations***

The present study yielded a number of important findings for the development of future campaigns. We can better understand the utility of dealers' comments by examining them in relation to theories of persuasion. By pairing dealers' recommendations for constructing new ROPS campaigns with these theories, we can begin to develop more targeted campaigns designed to overcome farmers' objections to ROPS. To

summarize the comments (in both text and tables) in relation to social science theories, future campaigns should do the following:

1. Provide accurate estimates of the cost of a ROPS to create realistic expectations.
2. Focus on farmers' vulnerability to tractor overturn incidents, the negative consequences of an overturn and the effectiveness of a ROPS in preventing the negative consequences of an overturn.
3. When campaigns create dissonance (a feeling of discrepancy between campaign messages and farmers' actions or values), messages should be varied to maximize persuasion.
4. Demonstrate that no sponsor is benefiting financially. Thus, farmers will be less likely to dismiss the campaign as being based on perceived ulterior motives.
5. Emphasize the gain to the end user in terms of the losses that will be avoided. This would include preventing the loss of life, preventing lawsuits, preventing the loss of the family farm from high medical bills and preventing permanent disability.
6. Provide dealerships with actual photos of overturned tractors for displays using their brand tractor.
7. Provide dealerships with concise, written responses to frequently asked customer inquiries related to homemade ROPS, ROPS removal and ROPS height.
8. Build intervention messages about the value of sun protection and ROPS to support a canopy.
9. Use multiple methods for dissemination (newspapers, radio, presentations) targeting multiple audiences.
10. Promote the higher resale value of a ROPS equipped tractor.
11. Include the statement "Installation and shipping costs vary" in written or oral materials.
12. Develop a package along with dealers such as a "retro-fit your tractor day," or "winter care plus ROPS day."
13. Provide dealers with copies of "A Guide to Agricultural Tractor Rollover Protective Structures" (Strack and Young, 1997).
14. Conduct a short training session with sales people at dealerships to show them the value of ROPS and seat belts and equip them with the materials to help farmers learn these benefits.
15. Promote fold-down ROPS to overcome the barn access/height barrier.
16. Make the messages personal. Cases and narrative

first person reports of real life cases often are more powerful than statistics.

Several issues raised in this study warrant further exploration in future studies. Dealers believe that the resale value of a ROPS-equipped tractor is higher than the value of a non-ROPS tractor. It would be useful to know whether this perceived value of retrofitted tractors is equal to the actual resale value. If so, this information should be used in future ROPS-promotion campaigns.

The qualitative data gathered in this study have yielded important findings that can strengthen future ROPS-promotion campaigns and help guide other community-based public health interventions. Equipment dealers' central position in the agricultural community has made them invaluable informants on the success of this ROPS retrofit campaign. By comparing equipment dealers' comments with the major principles of well-supported theories in the domains of communication and social psychology, equipment dealers' recommendations offer ample guidance for future campaigns.

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## Notes

1. OHNAC was a five-year project funded by NIOSH to conduct farm-related injury surveillance and implement intervention programs in nine Kentucky counties.

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