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[Return to Current Issue](#)

Assessing Rural Coalitions That Address Safety and Health Issues

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Abstract: Community coalitions can help national organizations meet their objectives. Farm Safety 4 Just Kids depends on coalitions of local people to deliver farm safety and health educational programs to children and their families. These coalitions are called chapters. An evaluation was developed to identify individual coalition's strengths and weaknesses. Ten FS4JK chapter locations conducted a SWOT analysis (strengths, weaknesses, opportunities, and threats) and community focus groups to identify what strategies could be incorporated to improve each coalition's functionality. The findings will help strengthen program delivery, which will guide the national organization toward a more effective support system.

Introduction

Community coalitions that work to address a specific issue, in this case farm injury prevention, can be influential in achieving positive change within the community. Farm Safety 4 Just Kids uses a coalition model within their chapter structure. An assessment of the coalition's effectiveness is vital to ensuring that resources are used efficiently within the community.

Farm Safety 4 Just Kids (FS4JK) was initiated in 1987 by Marilyn Adams, a year after the death of her son, eleven-year-old Keith Algreen in a gravity flow wagon on their family's Iowa farm. It became evident that community coalitions were needed to conduct farm safety and health educational programs within local areas. Farm Safety 4 Just Kids made the decision to call their coalitions chapters. In 1992, the first FS4JK chapter was initiated in Ohio. Currently, 119 chapters (or coalitions) are working within their local communities to attain the mission of promoting a safe farm environment to prevent health hazards, injuries, and fatalities to children and youth.

When FS4JK was first initiated, there were fewer other organizations based on a community farm safety and health model. Within the past couple of decades, other coalition-type organizations have formed to address farm injury prevention (Palermo & Ehlers, 2002). The processes that influence participation and success of community coalitions are important. The multi-faceted aspects of community participation in prevention activities are indicated by needs assessment, leadership, organization, resource mobilization, and management (Bichmann, Rifkin, & Shrestha, 1989; Garratt, 1999). Attitude change, a precursor to behavior change, is realized primarily through interactions with other humans. Changing attitudes is best approached at the community level (Cole, 2001).

Many FS4JK chapters include Extension as members. The FS4JK chapters benefit from the vast experience of Extension, which often uses coalitions to accomplish its missions. Extension staff, through their work with community coalitions, give insight into the variables that influence a coalition's sustainability and effectiveness in accomplishing its objectives. Common goals, a feeling of responsibility, outside funding, member enthusiasm, and coalition recognition have been shown by Lodl and Stevens (2002) to be crucial to the success of coalitions in general. By identifying factors that influence the success of coalitions the group can be more effective in developing long-term strategies to ensure sustainability (Lodl & Stevens, 2002). Successful collaboration helps individual efforts to reach common goals, achieve program sustainability, contribute resources, and increase program development activities (Strieter & Blalock, 2006). The project reported here isolated factors that influence the success of rural coalitions in reaching community members and influencing positive behavior change. Other organizations, including Extension, will gain by replicating similar assessments.

A major challenge facing most coalitions is conducting a rigorous program evaluation (Lehtola et al., 2008; Palermo & Ehlers, 2002). While some are conducting process evaluation, many are conducting little or no evaluation at all (DeRoo & Rautiainen, 2000). Money and energy spent on evaluation is well spent, because it encourages redirection of resources to potentially more useful programs (Palermo & Ehlers, 2002).

Studies show positive impact of coalition activities on the knowledge and behavior of participants

(McCallum, Conaway, & Reynolds, 2009). The main target of FS4JK programs is young people. In the process of learning ways to avoid hazards and resulting injuries, children who have attended programs influence other family members and the community to stay safe and healthy. Community involvement enhances safety awareness within the wider community beyond the children and adults who are directly involved with the event (McCallum et al., 2006). Community prevention partnerships have produced useful educational and motivational tools, helped build infrastructure for promoting agricultural health, and increased interest in collaborating on further research (Ehlers & Palermo, 2005).

Evaluating injury prevention systems can be difficult. Traditional research designs are usually not practical to implement. With numerous variables influencing each individual location, it is best to judge the mix of strategies that work with each population so communities can select effective prevention strategies (Moller, 2004). As a result of community programs, small changes at the individual level may result in large benefits at the population level (Sorenen, Emmons, Hunt, & Johnston, 1998).

Farm safety and health are more than one person's or a single family's responsibility. To prevent injuries to the community's youngest residents, everyone plays a role in prevention. The project reported here assessed rural coalitions to identify characteristics that make them stronger, open doors of opportunity, overcome threats, and transform weaknesses. The resulting change is safer and healthier environments for children and youth.

Project Goal

- Identify the strengths and weaknesses of delivering farm safety and health messages through a rural coalition system.

Project Objectives

- Gather information from chapter members to determine themes and variables that influence each chapter's success.
- Identify chapters' strengths that lead to and weaknesses that impede delivering successful programs.
- Identify knowledge, attitude, and behavioral changes among community people who have participated in chapter programs.

Methodology

In order to identify the success of FS4JK chapters a three-pronged approach was developed. 1) Telephone interviews were conducted to prioritize the most common strengths and weaknesses of a majority of FS4JK chapters. 2) Using the top listed strengths and weaknesses from the telephone interviews as a starting point, 10 randomly selected chapters were asked to complete a SWOT (strengths, weaknesses, opportunities, and threats). The purpose of the SWOT was for the chapter to analyze their organization and create a strategic planning tool for future development. 3) Within

these same 10 FS4JK chapter communities, a focus group consisting of non-chapter community people was asked about the influence of the FS4JK chapter on their community.

Telephone Interviews

Telephone interviews were used to obtain information from FS4JK chapters about their perceived strengths and weaknesses. Telephone interviews have shown to be comparable to face-to-face method in smaller scale qualitative studies (Carr & Worth, 2001). Telephone interviews are useful within the agricultural sector to obtain useful information about preventing injuries (McCallum et al., 2005; Gomez et al., 2003).

A telephone survey of half (64) the FS4JK chapters helped narrow the strengths and weaknesses as a starting point for SWOT discussions. The interviews were conducted by a national FS4JK staff person with the chapter representative, the lead contact with each chapter. Interview respondents consisted of 49 females and 15 males. The average age of the responding chapters was 6.3 years, with a range of 0 to 16 years. The average size of the responding chapters was 10.4 members, with a range of 1 to 56 members.

SWOTs

SWOT (strengths, weaknesses, opportunities, and threats) are assessment tools used to gather a holistic understanding and perceptions of a group of people. They provide a transition between data collection and action (Fisher, Tribe, & Apsley, 2006). SWOTs have a half-century of use and documentation in the literature. The SWOT analysis is used as a tool for planning purposes and is pervasive, in large part, due to its simplicity (Helms & Nixon, 2010).

Ten SWOT analyses were conducted in FS4JK chapter locations. Sites were randomly selected weighted on current chapter locations: Colorado, Florida, Illinois, Kentucky, Minnesota, Missouri, Nebraska, New York, Ohio, and Texas.

Each SWOT discussion group was comprised of six to 10 FS4JK chapter members. The SWOT participants consisted of 42 females, 31 males, and two unknown. To reduce influence by national FS4JK staff, each SWOT was led by a local facilitator identified by the chapter representative. Chapter representatives were asked to select someone with good facilitation skills who was not a part of their chapter. Many of the facilitators were Extension personnel from neighboring counties. Guidelines for consistent facilitation, including suggested agenda, background material, SWOT exercise instructions, and SWOT matrix forms, were sent to each facilitator. Upon SWOT completion, the group listed the strengths, weaknesses, threats, and opportunities of the chapter as well as strategies to address each issue. This information was reported to the national office. Chapter demography of SWOT participants is listed in Table 1.

Table 1.
SWOT Participant Demographics
(n=75 participants *)

Chapter Position			Years of Chapter Experience			Number of Events Participated in the Past Year		
Officer	13	17%	< one year	6	8%	One event	13	17%
Program Presenter	29	39%	1 to 2 years	23	31%	2 to 4 events	25	33%
Resource Provider	15	20%	2 to 5 years	24	32%	5 to 10 events	20	27%
Not Identified	18	24%	5 years or more	20	27%	>10 events	12	16%
			Not identified	2	2%	Not identified	5	6%
*10 SWOT sites								

Focus Groups

Focus groups are often used to provide an understanding of stakeholder and client priorities and determine program relevance to the community (Foote, Clark, & Recker, 2004; Nordstrom, Wilson, Kelsy, Maretzke, & Pitts, 2000; White, Arnold, & Lesmeister, 2008). Ten Community focus groups were facilitated by FS4JK staff in the same locations as the SWOTs to identify effects the chapter had on the community. While cognitive bias could take place by anyone connected to the chapter, it was determined that FS4JK national staff would produce less bias than if facilitated by local chapter representatives. Seven to 10 people connected with the chapter as instructors, media people, funding agencies, local businesses, and parent/grandparents were asked to attend and discuss their perception of how the chapter impacted themselves and the community. Questions were asked about the visibility, benefits, and number of people reached by the FS4JK chapter. These focus groups identified changes among individuals and the community in relation to farm safety attitudes and behavior. The demographics of community focus group participants are shown in Table 2.

Table 2.
Community Focus Group Participant Demographics
(Participant n = 77*; Group size range 6 to 10 people)

Role in Chapter (May have marked more than one response)	Level of Event Participation
--------------------------------------------------------------------	-------------------------------------

Attended a FS4JK event	51	66%	Involved with one FS4JK event	25	32%
Child or grandchild attend event	19	25%	Involved with two events	7	9%
Event volunteer	26	34%	Involved with three to five events	21	27%
Event presenter	26	34%	Involved with > five events	18	23%
Funding agent	9	12%	Not identified	6	8%
*10 Focus group sites					

Results

Telephone Interviews

The top five strengths and four weaknesses were identified from the chapter telephone interviews by tabulating responses. Results are shown in Table 3. This information was given to SWOT facilitators. Chapter members could use these items or their own determination of strengths and weaknesses as a basis for further discussion.

Table 3.
Strengths and Weaknesses Identified in Telephone Survey
(n = 64; alphabetical order)

Strengths	Weaknesses
Business partnerships	Community awareness and support
Community support	Funding
Member attributes	Membership
Strong activities	Time
Youth/peer involvement	

SWOTs

Using the strengths and weaknesses identified within the telephone interviews as a starting point, each participating FS4JK chapter conducted a SWOT activity led by a local facilitator. Although telephone responses for strengths and weaknesses were not prioritized, the SWOT information was. Results of the SWOTs are reported in Table 4.

Table 4.
SWOT Summary of Responses
(n = 75 participants in 10 SWOT locations)

Strengths (in order of frequency listed)	Weaknesses (in order of frequency listed)
<ul style="list-style-type: none"> • Strong Activities • Community Support • Member Attributes • Youth Involvement 	<ul style="list-style-type: none"> • Membership • Community awareness and support • Time • Funding
Opportunities (no order of listing)	Threats (no order of listing)
<ul style="list-style-type: none"> • Networking • Diverse member attributes • Schools • Youth • Local business support • Topic related sponsorship 	<ul style="list-style-type: none"> • Budget cuts • Apathy • Difficulty getting into schools • Member time constraints • Long Term Funding • Lack of community involvement

Community Focus Groups

The community focus groups facilitated by FS4JK staff identified how the chapter has influenced individuals and the community as a whole. Participants were asked by the facilitator how knowledge, attitude, and behavior have changed since the local FS4JK chapter formation. They indicated whether the change was their own or observed in another person. Listed in Table 5 are examples of change.

Table 5.
Community Focus Group Responses
(n =77 participants in 10 locations)

Knowledge examples	Behavior examples	Attitude examples
<ul style="list-style-type: none"> • Auger companies will replace auger and PTO shields 	<ul style="list-style-type: none"> • Removed strings from hooded sweatshirts 	<ul style="list-style-type: none"> • Child told Dad he didn't feel comfortable doing unsafe task

<ul style="list-style-type: none"> • How to safely use a fire extinguisher 	<ul style="list-style-type: none"> • Sons do not get into gravity flow wagons 	<ul style="list-style-type: none"> • Kids remind parent to wear an ATV helmet
<ul style="list-style-type: none"> • Skunks are the biggest carrier of rabies 	<ul style="list-style-type: none"> • Sister started wearing a helmet 	<ul style="list-style-type: none"> • Children seemed to ask more questions and follow directions

A Likert scale will check on a level of agreement from the focus group participants about impact of the chapter on the community (Gall, Borg, & Gall, 1996). Because a suitable pre-existing scale was not available, one was designed using a five-point scale. A five-point scale can provide data quality, internal consistency, and discriminate validity (Osteras et al., 2008). When asked by the facilitator to compare the FS4JK Chapter to other organizations in the community such as 4-H, FFA, etc., on a scale of 1(low) to 5(high), the community focus group scored the FS4JK chapter 1.8 for visibility, 4.4 for beneficial for the community, and 2.5 for the number of people reached. This suggests that most FS4JK chapters are viewed as highly beneficial to the community, but have low visibility.

Participating Chapter Demographics

The following criteria were employed to categorize participating chapters.

- Oldest chapters were classified as such if > 12 years old.
- Newest chapters were classified as such if < 4 years old.
- Largest chapters were classified as such with > 17 members.
- Smallest chapters were classified as such with < 9 members
- Mean longevity of participating chapters was 7.6 years.
- Mean number of participating chapter members was 11.3 members.

Chapter Longevity

- The oldest FS4JK (>12 years) and the youngest FS4JK chapters (<4 years) had differing views about what were their chapter's top strength. The oldest chapters stated that member attributes were their highest strength, while stating youth involvement was the least of their strengths. The youngest chapters (<4 years) stated youth involvement as their top strength and member attributes along with strong activities as their lowest strength.

- The most frequent weakness stated by older chapters was community awareness and support, while the newest chapters identified competition for resources as their greatest weakness.

Chapter Size

- Larger chapters felt their most frequent weaknesses were associated with community awareness and support, while the smallest chapters felt that their greatest weaknesses were associated with funding and few members.

Associations Between Coalitions and Community Focus Groups

- Older chapters had more members than did newer chapters ($r=.543$, $p<.001$).
- Chapters that had higher visibility within the community reached more people ($r=.691$, $p=.002$).
- The greater the number of events in which focus group participants were involved, the greater the number of people reached within the community ($r=.668$, $p=.007$).
- The greater the number of events in which focus group participants were involved, the more positive was the perception of community visibility ($r=.691$, $p=.002$).

Analysis of variance and cross tabulations were conducted on quantitative data using SPSS; Excel was used to summarize results for open-ended data.

Limitations

Evaluation of all community coalitions is a constant struggle to ensure that the resources expended to accomplish the coalition's goals are met. Within the project reported here, individuals during the telephone interviews and coalitions in the SWOT exercises gave feedback about what constitutes a strong coalition, what areas most need assistance, and impacts on the community. The individual and group perceptions of success may or may not coincide.

When conducting qualitative data collection, potential bias is a concern. The use of professional facilitators can be expensive, therefore a compromise of using national FS4JK staff to facilitate the community focus groups and hiring local facilitators to lead the chapter SWOTs was made. Detailed instructions were sent to all local SWOT facilitator to address report consistency. FS4JK staff conducted all the community focus groups, reducing concern about consistency for the collected data. Cognitive bias was most likely still present even with a national representative present at each focus group, although less than if facilitated by local leaders.

As with all self-reported answers, there is a chance responses may be skewed either positively or negatively. Participants were encouraged to be honest with their responses.

Discussion

Chapter size and longevity influence the number of people reached within the community and the perception of the chapter's visibility within the community. As chapters age, their membership tends to grow. The larger chapter size increases visibility within the community and the number of people reached. As chapters increase their activity level, they reach more community members. As chapters increase their community activities, the community's perception of visibility rises. The importance of having coalitions made up of varied members is vital to chapter success. The longevity of chapters with resulting success in reaching more community people was shown in the collected data.

The youngest chapters indicated that member attributes and strong activities were their least strong area. The authors believe that additional resources and training are needed to enhance activity delivery and build these individual chapter strengths.

Community participants indicated several ways in which the chapters had influenced them, their families, and other community members. Tractors, farm machinery, and helmet use were referred to most frequently as hazards that result in behavior modification and observed changes. This information stresses the importance of educational material, programs, and other resources that are useful for a chapter.

The findings are applicable to other types of coalitions. Longevity and size of the group influence a coalition's success at reaching more people in the community.

Conclusions

The SWOT analysis in 10 FS4JK chapter locations, identifying strong activities as the major strength of their coalition, suggests more effort be targeted toward strengthening program activities in all chapter locations. Membership was listed most often as the major weakness, suggesting that this be of paramount concern within the organization.

Associations between chapter size, age, community participation, and community perception of visibility suggest that coalitions are more effective when they increase in number and have been in existence for a greater period of time.

Summary

Community coalitions can help national organizations reach their objectives. Farm Safety 4 Just Kids has used a community coalition model in the form of chapters for nearly 20 years. The project reported here, consisting of a telephone interviews, SWOT exercises with coalition members, and community focus groups confirm an intuitive understanding about coalitions that support safety and health programming efforts. FS4JK chapters that have been in existence the longest depend on their member attributes to sustain their membership. These established community coalitions have members with valuable attributes while newly formed community coalitions lack this strength. On the other hand, new community coalitions are often filled with youth involvement, and the established community coalitions are in need of youth involvement. The age of the community coalitions also has a relationship to the number of members with older ones having more members.

The understanding that more events offered by the community coalition strengthen the perception of the positive impact and visibility within that community is confirmed. Similarly, the more events that are offered, the larger the number of people reached with the community coalition's messages. This clearly suggest that being an active community coalition adds value to maintaining the group and being successful of promoting safety and health issues.

Community coalitions and other volunteer organizations will be strengthened by identifying these characteristics, understanding the differences, and developing strategies to address the specific needs connected to each one.

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