

6-1-2003

## Using Research and Planning to Develop Community Outreach: A Case Study in Helping Clientele Cope with Stress

Thomas W. Blaine

*Ohio State University Extension*, [blaine.17@osu.edu](mailto:blaine.17@osu.edu)

LuAnn Freppon

*Ohio State University Extension*, [freppon.1@osu.edu](mailto:freppon.1@osu.edu)

Joseph Konen

*Ohio State University Extension*, [konen.2@osu.edu](mailto:konen.2@osu.edu)



This work is licensed under a [Creative Commons Attribution-Noncommercial-Share Alike 4.0 License](https://creativecommons.org/licenses/by-nc-sa/4.0/).

---

### Recommended Citation

Blaine, T. W., Freppon, L., & Konen, J. (2003). Using Research and Planning to Develop Community Outreach: A Case Study in Helping Clientele Cope with Stress. *The Journal of Extension*, 41(3), Article 7. <https://tigerprints.clemson.edu/joe/vol41/iss3/7>

This Feature Article is brought to you for free and open access by the Conferences at TigerPrints. It has been accepted for inclusion in The Journal of Extension by an authorized editor of TigerPrints. For more information, please contact [kokeefe@clemson.edu](mailto:kokeefe@clemson.edu).



June 2003 // Volume 41 // Number 3 // Feature Articles // 3FEA5



PREVIOUS  
ARTICLE



ISSUE  
CONTENTS



NEXT  
ARTICLE

## Using Research and Planning to Develop Community Outreach: A Case Study in Helping Clientele Cope with Stress

### Abstract

Extension educators collaborated with local agencies to conduct a survey on sources of stress in the lives of local residents. Results reveal that five variables emerge as statistically significant factors associated with reported stress levels: financial problems, stress on the job, having too little time, number of major life changes in the past year, and being a woman. Educators followed with a Vision to Action Program that identified specific goals aimed at helping community residents cope with and reduce stress levels. Combining applied research with existing Extension programming is an effective way to engage the public on issues of local concern.

### Thomas W. Blaine

Associate Professor  
Wooster, Ohio  
Internet Address: [blaine.17@osu.edu](mailto:blaine.17@osu.edu)

### LuAnn Freppon

Extension Agent, Family and Consumer Sciences/Community Development  
Mansfield, Ohio  
Internet Address: [freppon.1@osu.edu](mailto:freppon.1@osu.edu)

### Joseph Konen

Associate Professor and District Specialist, Urban Programs  
Wooster, Ohio  
Internet Address: [konen.2@osu.edu](mailto:konen.2@osu.edu)

Ohio State University Extension

### Introduction

Prioritizing Extension and other community outreach is aided by research and community-based planning (Guy & Rogers, 1999; Nieto, Schaffner, & Henderson, 1997). This case study describes a process that couples applied survey research with a community-based planning process to set a course for community education and outreach. Extension educators and other community leaders will find that the basic two-stage process is replicable in a variety of settings and situations.

The first stage of this project included a survey to identify factors associated with stress among residents of Richland County, Ohio. In the second stage, Extension educators and their partners used the survey results as a springboard for launching a Vision to Action planning process to determine future programming direction.

Helping people identify and cope with sources of stress in their lives has emerged as an important topic in a variety of Extension program areas, including Family and Consumer Sciences and Community Development in recent years (Fetsch, 1997; Schulman & Armstrong, 1990; Thompson, 1985). This subject has long been an issue in the field of public health as well. So it should not be surprising that Extension educators are increasingly finding themselves working in collaborative multi-disciplinary groups to plan and implement programs designed to achieve specific goals in helping residents in their communities deal with stress.

### Study Area

Richland County, Ohio is a community located in north central Ohio. With a population of approximately 129,000 (U.S. Department of the Census, 2000), it is somewhat typical of many Midwestern communities that make up what has come to be known as the "rust belt." The city of Mansfield constitutes the urban core of what is predominantly a rural county. A city founded on heavy manufacturing, Mansfield has seen its industrial base as well as its population decline in recent decades.

In contrast to this trend, communities near the urban fringe have seen population increases, while the agricultural base of the county remains very important and vital to the overall economic well-being of the community. In the most remote portions of the county, a vibrant tourism industry has emerged to capitalize on the scenic beauty and other environmental amenities of the region. The tourism industry includes two winter ski areas, a state park, and numerous private campgrounds.

In communities of transition such as Richland County, changes often contribute to the stress levels of residents (Silver, Mulvey, & Swanson, 2002; Ross & Mirowsky, 2001; Faris & Dunham, 1939). Uncertainty about the future, particularly concerning the direction in which a community is heading socially and economically, are well known factors in affecting the emotional conditions of residents (Dunham, 1976). So in a sense, Richland County provides a very appropriate setting for the type of study described here.

## **Background, Problem Statement, and Purpose**

In the mid 1990's, representatives of local agencies, including the Health Department, Children's Services, and Ohio State University Extension, formed a group called the "Richland County Family and Child Health Services Consortium." The function of the group is to provide education and assistance to residents dealing with a host of health-related issues ranging from drug rehabilitation to neonatal care.

In 1998, a survey conducted by the consortium revealed that depression and stress were among the most common health problems reported by residents. The consortium began planning for a community effort related to these issues. The first step was to sponsor a rigorous study to identify the sources of stress in the lives of residents. This would be followed by a planning process to develop educational programs designed to help people understand sources of stress and to develop effective coping strategies.

This article describes the survey procedure and results, and the community development process that followed in the wake of the of the research findings.

## **Survey Design and Method**

In January 2001, representatives of agencies in the consortium designed a questionnaire to measure stress levels of Richland County residents and to attempt to identify factors that contribute to stress. The concept of producing quantitative measures of stress in people's lives has been widely investigated ever since the seminal article on this topic was published in 1967 (Holmes & Rahe).

The survey instrument the consortium developed incorporated a number of the key elements of the well known Holmes-Rahe scale, but it differed to the extent that, rather than attempting to assign an overall stress level to each respondent based on events or issues in their lives, the survey allowed the individual to report his/her own stress level as she or he perceived it. The issues/events used in the Holmes-Rahe scale were also collected as data and then compared statistically to determine the impact of each on overall perceived stress.

The consortium obtained a mail list of the names and addresses of 5,000 Richland County residents, and selected every tenth name to get a sample of 500 for the survey. The sample size was selected following guidelines published by Krejcie and Morgan (1970).

A first mailing was sent on February 6, 2001. The mailing included a return stamped envelope and a request for a return by February 14. A second mailing was sent to those who had not responded to the first mailing. Each name was coded with a combination of letters and numbers to maintain anonymity. The survey was printed on a separate color of paper (beige) and a stamped envelope was included. Also included in the second mailing was a bright pink memo that read:

Your opinion is important to us. The information you provide by answering this questionnaire will be used by many agencies in Richland County to determine programs and services. Please return the answered survey by February 28, 2001. If you have already sent yours, please ignore this notice, and we thank you!

All questionnaires returned by February 28, including a few that arrived later than that date, were included in the survey. The first mailing produced a total of 90 usable surveys, while the second produced another 54, bringing the total number of responses to 144, which is 32% of the initial sample, after adjusting for non-deliverable mailings.

A relatively low response rate is to be expected on a survey of this nature, which asks respondents to answer questions that are very personal and at times painful to confront. The main problem that can arise from a low response rate is non-response bias, where the pool of respondents differs in

important ways from those who did not respond. If this is the case, we cannot use our results to generalize to the entire sample, let alone the population of the community.

Operating on the assumption that late respondents are more like non-respondents than those who answered early, we can conduct statistical tests to determine whether non-response constitutes a problem, even when the response rate is relatively low (Dillman, 1978; Miller & Smith, 1983). Our tests did not reveal any statistical differences between early and late respondents on any survey question ( $p < .05$ ). As a result, we conclude that, despite the low response rate we obtained, non-response bias is unlikely in this case. We address this issue in more detail with the presentation of the multiple regression results that follow.

### Findings on Levels of Stress and Related Factors

Respondents were presented with a series of statements and asked to respond on a five-point scale, ranging from strongly agree to strongly disagree, always to never, etc., depending on the nature of the statement. The results are presented in Table 1.

**Table 1.**  
Likert Scale Responses on Stress/Sources\*

<b>1. Stress is a major problem in my life.</b>	
Not a problem	21
Bit of a problem	25
So so	24
A regular problem	20
A major problem	9
<b>2. I am sad a lot of the time.</b>	
Strongly Agree	1
Agree	12
So so	22
Disagree	46
Strongly Disagree	19
<b>3. I worry a lot.</b>	
Strongly Agree	8
Agree	30
So so	30
Disagree	27

Strongly Disagree	6
<b>4. I have problems paying my bills.</b>	
Never	29
Almost never	14
Not really	19
Sometimes	29
Always	9
<b>5. I have enough time to do what I need to do.</b>	
Never	3
Almost Never	11
Not Really	28
Sometimes	44
Always	15
<b>6. I have friends and family to help and support me.</b>	
Many	27
Some	24
Enough	25
One or Two	20
None	4
<b>7. I understand why my children act the way they do.</b>	
Always	6
Usually	47
Not a concern	24
Sometimes	20

Never	2
<b>8. I have a steady job.</b>	
Always	58
Usually	12
Don't need one	21
Sometimes	4
Looking	5
<b>9. My family is in good health.</b>	
Always	10
Usually	73
Sometimes	13
Rarely	2
Almost Never	1
<b>10. My relationship with my children causes me stress.</b>	
Always	3
Usually	2
Sometimes	40
Rarely	41
Never	14
<b>11. Anger is a problem in my home.</b>	
Always	2
Usually	6
Sometimes	20

Rarely	54
Never	18
<b>12. My spouse (girlfriend, boyfriend) and I have a hard time getting along.</b>	
Always	0
Usually	4
Sometimes	15
Rarely	53
Never	28
<b>13. I have had major changes in my life in the past year.</b>	
Many	14
Some	16
Few	21
Not Really	23
None	26
<b>14. I have good choices for a place to live.</b>	
Many	39
Some	38
Few	8
Not Really	10
None	5
<b>15. I have money left over at the end of the month.</b>	
Always	23
Usually	31

Sometimes	17
Rarely	17
Never	13
<b>16. My job situation is very stressful.</b>	
Always	8
Usually	16
Sometimes	43
Rarely	14
Never	17
* Note: Percentages may not sum to 100 due to rounding.	

These results reveal that stress is a regular or major problem in the lives of 29% of respondents, with another 24% reporting a moderate level of stress, or "so so" (statement 1). This total constitutes over half of the population. Stress easily outpaces depression as a problem (statement 2), as only 13% either agreed or strongly agreed that they are "sad a lot of the time."

The numbers on "worry" are slightly higher than the "stress" numbers (statement 3). Problems paying bills are sometimes or always a problem for nearly 40% of respondents, while another 43% never or almost never have difficulty with this. The problem of too little time does not seem to be extremely widespread in this sample, with a total of 60% having enough time to do things they want either sometimes or always; however, as we will see later, the time constraint is an important contributor to the stress levels of individuals.

A relatively large percentage of respondents get enough assistance from family and friends, indicating strong informal bonds of support in the community. For a strong majority of respondents, understanding their children is not a major problem.

Employment and health concerns do not appear to be a great burden to most respondents. Children do not appear to be a major source of stress in most households, but they are at least sometimes a source of stress for 45% of respondents. Anger is an infrequent problem in most households, as is getting along with spouse or significant other.

Roughly half of respondents report having had at least a few major changes in their lives in the past year. Finding a good place to live has been a problem for at least 23% of respondents.

The sample is nearly perfectly split between always or usually having money left over at the end of the month and sometimes, rarely, or never (statement 15). A total of over two-thirds of respondents state that their job situation is stressful (statement 16).

A second portion of the survey asked respondents a number of demographic questions, including gender, age, family income, and number of people living in the home.

### **Analysis of Data**

One of the primary objectives of this study was to identify the characteristics of those respondents who reported higher (lower) degrees of stress in their lives. We used a statistical procedure called "multiple regression analysis" to specify an equation to explain or predict why some reported higher levels of stress in their lives than others did (statement 1 on the survey). Regression procedures are not new to Extension educators (Blaine, Mascarella, & Davis, 2001; Dhanakumar & Rossing, 1996). The purpose of regression is to generate an equation to explain or predict any given variable, called the "dependent variable," as a function of a set of other variables, called "independent variables."

The independent variables that we chose to include in this analysis were:

- Money problems (as measured by statement 4),



- Time constraints (statement 5),
- Support of friends (statement 6),
- Health of family members (statement 9),
- Stress caused by children (statement 10),
- Difficulties with spouse or partner (statement 12),
- Major life changes in the last year (statement 13),
- Job situation (statement 17),
- Gender,
- Age,
- Number of people living in the home, and
- Early versus late response.

The results are presented in Table 2.

**Table 2.**  
Regression Results on Variables Associated with Stress: Model 1

<b>Dependent Variable (Stress Is a Major Problem in My Life)</b>			
<b>Independent Variable</b>	<b>Parameter Estimate</b>	<b>t-value</b>	<b>Significance</b>
Problems Paying Bills	.175	2.35	.02*
Time	.162	1.32	.19
Friends and Family Support	-.005	-.063	.95
Family Health	.306	1.99	.05
Children Cause Stress	-.031	-.267	.79
Spouse (Partner) Relations	.258	1.93	.06
Major Changes in Past Year	.264	3.77	.00**
Job Situation	.419	4.30	.00**
Gender	.450	2.50	.02*
Age	.001	.124	.90
# of People in Home	.100	1.44	.15
Early/Late Response	-.166	-.881	.38
R-Square = .62 ** Denotes statistically significant at the 99% level of confidence * Denotes statistically significant at the 95% level of confidence			

These regression results reveal that four factors are highly statistically associated with the stress levels of respondents:

- Difficulty paying bills,
- Number of major life changes in the past year,
- Stressful job situation, and

- Gender (with women showing more stress levels, on average, than men do).

Failure to find statistical relationships in an equation like this, and indeed finding the presence of these relationships, can often occur as a result of associations between the variables in the equation. Occasionally, these associations may be spurious, or they may be inextricably linked.

For example, the survey asked several different questions that could represent how money can affect the respondents' circumstances and therefore stress levels. These were:

- Problems paying bills (statement 4),
- Money left over at the end of the month (statement 15), and
- Income category.

As we might expect, the relationships between these variables were highly statistically significant. That is, those who reported having problems paying bills also tended to report having little or no money left over at the end of the month and also tended to be in a low income category. It would not be appropriate, however, to use all three of these variables in the equation. Because they are related, the regression procedure would have difficulty in separating the effects of each. In this case, we chose to use only the question on problems paying bills as a measure of financial stress in the lives of the respondents.

Rather than discarding all of the variables that failed to achieve statistical significance in the first equation, we discarded only those that had t values below 1. Note that among the variables discarded is the one measuring early versus late respondents. The low t-value on this variable is a strong indicator that non-response bias is absent from this sample, as was discussed earlier.

Subsequent regression estimates allowed us to refine the results, until we obtained a regression where all the remaining variables were statistically significantly different from zero at the 95% level of confidence. The results of this procedure are presented in Table 3.

**Table 3.**  
Regression Results on Variables Associated with Stress: Model 2

<b>Dependent Variable (Stress is a Major Problem in My Life)</b>			
<b>Independent Variable</b>	<b>Parameter Estimate</b>	<b>t-value</b>	<b>Significance</b>
Problems Paying Bills	.202	3.32	.00**
Time	.217	2.42	.02*
Major Changes in Past Year	.258	4.14	.00**
Job Situation	.425	5.82	.00**
Gender	.404	2.58	.01*
R-Square = .57 ** Denotes statistically significant at the 99% level of confidence * Denotes statistically significant at the 95% level of confidence			

The results from this regression reveal that all five of the remaining variables are highly statistically associated with the overall stress levels of respondents. It is important to note that excluding insignificant variables neither reduced the explanatory power of the equation (as measured by R-Square) nor influenced the parameter magnitudes to any great degree. The R-Square for the final regression indicates that these five variables account for 57% of the variation in stress levels as reported by respondents. The final set of parameters may be interpreted in a relatively straightforward way as follows.

Each level of increase in the response to "problems paying bills" contributes roughly to 1/5 (.202) of a level of increase in overall stress. Increasing the time constraint by one unit increases overall stress by a similar amount (.217). Increasing numbers of major life changes are associated with a 1/4 unit (.258) increase in overall stress. Rising job stress contributes nearly half a unit to overall stress (.425). Finally, women on average report roughly 4/10 point higher stress level than men

(.404) when all other factors are taken into account.

## Summary of Survey Findings

The findings in this study are very important not only for what they reveal but for what they did not show as well. A substantial percentage of the people who responded feel that stress is a regular or major problem in their lives. The factors most highly associated with stress include:

- Difficulty with money,
- Having enough time to do what one needs to do,
- Major life changes in the past year,
- Stress on the job, and
- Being a woman.

It is just as important to note that stress caused by family members such as children and spouses is not an important contributor to the stress levels of respondents. Neither does the presence of family and friends to help out seem to be an important factor in reducing stress levels. A significant number of respondents believe that their job situation is unreasonably stressful. Many undoubtedly feel that they are underpaid and overworked.

## The Outreach Phase: Vision to Action

In June 2001 members of the Richland County Child and Family Health Services Consortium released the results of the stress survey to the press at a public news conference. This event was reported in the television and print media, and as a result had the potential of reaching a high percentage of residents of the county with the results of the survey.

In November 2001, the consortium began a planning process to respond to the information in the survey. The steering committee for this process chose to utilize an Extension program called "Vision to Action: Take Charge Too" (North Central Regional Center for Rural Development, 2001). This program was originally created in the 1980s as a process designed to assist community leaders in achieving economic development goals.

Its use evolved throughout the 1990s, and it emerged in 2001 as a flexible program whose specific purpose can vary. In general, the process takes practitioners in a community from the point of problem identification to implementing an action plan for accomplishing specific goals. In its original form, the Take Charge Program typically involved a series of three to four public meetings held at 1-week intervals.

During November and December of 2001 community leaders within and beyond the consortium were invited to participate. Three sessions were held in January-February of 2002. The purpose of these sessions was to provide a programmatic direction to help members of the community identify and reduce their levels of stress based on the survey findings.

Participants addressed the following issues:

- What is currently being done in the community to help people cope with the problems identified in the survey?
- What still needs to be addressed?
- What inputs will be needed to accomplish these needs?
- What specific programs should be offered?
- What changes do we expect in the community as a result of these programs?
- What short term measures will identify successful implementation of programs?

As a result of the Vision to Action program, the committee identified three objectives for outreach. They were as follows:

1. Create a centralized registration and information data base for accessing community services, including those designed to help residents cope with stress. This data base will be accessible in all schools, libraries and in city/county buildings.
2. Require life skills courses in middle/high schools to include education on money management, parenting, prioritizing wants and needs, and responsible choices. Local agencies, including OSU Extension are providing programming and collaborating efforts to address this objective. Much of this effort simply involves presenting the survey results described in this article to secondary school teachers in the community.
3. Develop a coalition to work to meet early child care and education needs of families in an affordable manner. This objective is being referred to appropriate community agencies for funding.

The committee also discussed a fourth topic, establishing a pool of mediators to be an early step in providing conflict resolution at work sites. This topic emerged as very important in the survey as well as in the Vision to Action process. But because of concerns about employer reaction, the committee would not set a specific target, choosing instead to refer this objective to others in the community more focused on work force issues.

## Conclusions

The project described here demonstrates several important points. A collaborative research project involving participation by Extension and other public agencies is a useful springboard for addressing issues of public concern. The research findings can be used by community agencies to engage the public in planning responses to the identified community needs. The process of finding creative ways to help the public deal with stress and other similar problems is an important tool for community educators and agencies.

## References

- Blaine, T. W., Mascarella, K., & Davis, D. N. (2001). An examination of rural drop-off recycling participation. *Journal of Extension* [On-line], 39(5). Available at: <http://www.joe.org/joe/2001october/rb1.html>
- Dhanakumar, V. G., & Rossing, B. (1996). An evaluation of the Wisconsin rural leaders perspective program. *Journal of Extension* [On-line], 34(3). Available at: <http://www.joe.org/joe/1996june/rb3.html>
- Dillman, D. A. (1978). *Mail and telephone surveys: the total design method*. New York: John Wiley and Sons.
- Dunham, H. W. (1976). *Social realities and community psychiatry*. Kluwer Academic Publishers.
- Faris, D. E. L., & Dunham, H. W. (1939). *Mental disorder in urban areas*. Chicago: Hafner/Chicago University Press.
- Fetsch, R. J. (1997). Family life program accountability norms: How do your results compare? *Journal of Extension* [On-line]. 35(3). Available at: <http://www.joe.org/joe/1997june/a2.html>
- Guy, S. M., & Rogers, D. L. (1999). Community surveys: Measuring citizens' attitudes toward sustainability. *Journal of Extension* [On-line], 37(3). Available at: <http://www.joe.org/joe/1999june/a2.html>
- Holmes, T. H., & Rahe, R. H. (1967). The social readjustment rating scale. *Journal of Psychosomatic Research* 11: 213-218.
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities, in *Educational and Psychological Measurement*.
- Miller, L. E., & Smith, K. E. (1983). Handling non-response issues. *Journal of Extension* [On-line], 21(5). Available at: <http://www.joe.org/joe/1983september/>
- Nieto, R. D., Schnaffner, D., & Henderson, J. L. (1997). Examining community needs through a capacity assessment. *Journal of Extension* [On-line], 35(3). Available at: <http://www.joe.org/joe/1997june/a1.html>
- North Central Regional Center for Rural Development (2001). Vision to action: Take charge too. Available at: <http://www.ag.iastate.edu/centers/rdev/pubs/contents/182.htm>
- Ross, C. E., & Mirowsky, J. (2001). Neighborhood disadvantage, disorder and health. *Journal of Health and Social Behavior* 42(3): 258-276.
- Schulman, M. D., & Armstrong, P. S. (1990). Targeting farmers for stress reduction. *Journal of Extension* [On-line], 28(2). Available at: <http://www.joe.org/joe/1990summer/a2.html>
- Silver, E., Mulvey, E. P., & Swanson, J. W. (2002.) Neighborhood structural characteristics and mental disorder: Faris and Dunham revisited. *Social Science and Medicine* 55(8): 1457-1470.
- Thompson, C. J. (1985). Mixing apples and oranges. *Journal of Extension* [On-line], 23(1). Available at: <http://www.joe.org/joe/1985spring/a3.html>
- U.S. Department of the Census. (2000). *Current population reports*.

*Copyright* © by Extension Journal, Inc. ISSN 1077-5315. Articles appearing in the Journal become the property of the Journal. Single copies of articles may be reproduced in electronic or print form for use in educational or training activities. Inclusion of articles in other publications, electronic sources, or systematic large-scale distribution may be done only with prior electronic or written permission of the *Journal Editorial Office*, [joe-ed@joe.org](mailto:joe-ed@joe.org).

If you have difficulties viewing or printing this page, please contact [JOE Technical Support](#)