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STRESS: PROFESSIONAL DEVELOPMENT NEEDS OF EXTENSION FACULTY

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Abstract

This study was designed to identify workplace and individual factors that cause stress in the lives of Extension professionals and to determine baseline needs assessment data for professional development in the area of balancing work and family. A census-survey questionnaire (74% response rate) was utilized to explore balancing work and personal life issues among the population of University of Florida Extension faculty. It was found that some faculty have stress under control while others are experiencing high levels of stress; county faculty perceived slightly higher stress than state faculty but this difference was not significant. Respondents reporting greater use of formal planning, planning for meetings, and "to do" lists tended to have lower stress scores. For Extension faculty, spending more time with family served as a coping mechanism for minimizing stress. Any stress inducing situations disclosed in this study can be improved upon through proactive professional development. Professional development programs and inservice training focusing on workday planning may help faculty cope with the stress and pressure of an Extension career. Greater organizational effectiveness can be achieved through employees being able to manage stress and work pressure via positive workplace skills.

Introduction and Theoretical Framework

Job stress, time management, and balancing work and personal life are issues that educators in the field of Cooperative Extension constantly struggle with. An Extension career can be very rewarding personally and professionally, as well as very demanding. Extension educators are able to bring about tremendous positive impact among individuals and communities through locally provided education and information. Yet for many, an Extension career is known for long hours, travel, frequent night and weekend work, and working with problems, issues and needs of others.

Personal and professional balance and high job demands are not new issues for Extension. The demands and stress of Extension and its effect on people have been studied for several years (Fetsch & Pergola, 1991; Riggs & Beus, 1993; Fetsch & Kennington, 1997). Each of these papers has served to document and reinforce the difficulties that Extension professionals have had with stress, burnout, depression, time management, and balancing personal and professional responsibilities.

The dilemma was recognized nationally by United States Department of Agriculture-Cooperative State Research, Education and Extension Service (USDA-CSREES) as early as 1981. As part of a national position paper on Cooperative Extension's role in strengthening American families, a national Extension Committee on Organization and Policy (ECOP) task force was also charged with examining the impact of stress and personal and professional balance within the Extension organization. The group determined that this was a critical issue, and as such, recommended that Extension's administrators needed to "critically examine their policies and practices and the resultant effects upon the family life of Extension employees" (ECOP Task Force, 1981, p. 3).

Fetsch and Kennington (1997) summarized a number of studies that specifically addressed these concerns within Extension. They found that stress and burnout existed within Extension organizations in all of the states studied; some studies noted a direct relationship between professional stress and family problems. The problem existed across all program areas with various levels of

significance. They concluded that Extension professionals could attain overall improvement through the use of stress and time management strategies. Furthermore, they concluded that organizational policies and practices that lead to higher levels of stress must be modified and programs must be implemented for increasing coping skills and productivity of Extension professionals. These conclusions closely parallel recommendations made for other business areas (Abernathy, 1999; Hitchin, 1999; Vincola, 1998).

Stress has been associated with mental tension and/or strain and is generally viewed as a nonspecific response of the body to a stimulus. The subjective feeling of stress is derived from a stimulus (stressor) and from environmental demands (Krannich et al., 1988). Individuals have unique reactions to stressors due to differing modes of coping, mediation, and other adaptive capabilities.

Stress can manifest itself in physical outcomes. For example, stress has been shown to affect the immune, endocrine, digestive, and cardiovascular systems (Pearlin, 1989). Similarly, evidence suggests it also negatively impacts mental health (NMHA, 1988). Alcohol and drug abuse, domestic violence, neurosis, and depression are frequently cited as some of the more common psychological impacts of stressors (Pearlin, 1989).

Although there are many causes of stress, within the workplace there are three primary sources: the employee's personal life characteristics, the work conditions and environment, and situations occurring within the job itself (Kirkpatrick, et. al. 1996). Within the context of the organization, Kirkpatrick has identified seven categories that may be stress-inducing: competition for resources; task interdependence; jurisdictional ambiguity; status problems; communication barriers; individual traits; and miscellaneous factors such as role conflicts, volume of work, work schedules, insufficient authority, deadlines, organizational pettiness, and inadequate training. A number of these items are interrelated with personal perceptions of time pressure, and abilities in workday planning, and managing others.

Time management and work habits have been at the core of job stress and balancing personal and professional lives for quite some time. Studies conducted in the 1960s and 1970s documented that people's work efficiency declines after eight hours of work (Mackenzie, 1972). Unfortunately, many people get into a habit of thinking "there is always tonight" for taking work home or staying late to get things done, thereby stretching work beyond the normal workday. Other early studies also showed that people who overemphasize their work at the expense of their family and marriage will eventually attain lower job performance (Mackenzie, 1972).

A more recent study conducted by the Franklin Covey Company describes similar workplace problems. The study reported that 83 percent of Americans want to be more organized, 50 percent feel guilty about taking time off from work, and 62% often eat lunch while they continue to work (Abernathy, 1999). People are trying to get more done (with work and family) in less time, which frequently leads to burnout and extreme frustration (Abernathy, 1999; Meikins, 1998; Perlow, 1999). Meikins (1998) found that some people feel extremely rushed and pressured at home, and as a result they may spend more time in the workplace for escape and personal gratification, which only exacerbates the situation.

Coping and mediation are mechanisms that can mitigate the negative effects of stress. Coping is an individual action, but is learned from one's reference group, in this case one's colleagues. Mediators are essentially social supports that help alleviate or lessen stress (Pearlin, 1989). Most of the research on coping and mediation has been psychological in nature, with a clear emphasis on the individual. This body of research has shown that locus of control beliefs are critical to coping. If people believe that they have control of good and bad outcomes in their life (high locus of control), they can effectively reduce stress. Krause (1987) found that locus of control beliefs buffer stress to a limited extent, and that efforts at enhancing locus of control (empowerment) by individuals actually eroded such beliefs. Similarly, Mirowsky

and Ross (1990) found that genuine control reduces stress, and most other coping methods are not as effective. Time management is generally seen as an effective means whereby individuals can control stress.

The issues of job stress, time management, and balancing one's personal and professional life is a significant dilemma in today's society and for Extension. These issues cause tremendous costs to organizations in employee medical problems, down time, sick days, job apathy, and lost productivity. For individuals these issues result in lowered wages, lessened job enthusiasm, depression, and familial difficulties. Extension must address these issues to attract and retain leading professionals, if it intends to continue as a principal provider of nonformal educational programs.

Purposes and Objectives

The goal of this study was to identify workplace and individual factors that increase or reduce stress in the lives of Extension professionals. The study was designed for determining baseline needs assessment data for professional development in the area of balancing work and family. By identifying sources and personal characteristics that are associated with stress, professional development efforts can be directly targeted to address high priority issues in this area. To meet this goal, the study had two objectives: (a) to develop indices of stress and workplace habits, and (b) to identify the relative strength of work place skills and individual and family demographics in perceived stress level using a multiple regression model.

Methods and Procedures

A census-survey questionnaire was developed to explore balancing work and personal life issues among the population of University of Florida Extension faculty. The questionnaire consisted of 82 items divided into three parts. Sections of the questionnaire included perceptions of the nature of Extension work; stress, time management, and other work habits; and personal and family demographics. A panel of 15 experts consisting of University of Florida county and state faculty with Extension knowledge and/or experience was utilized for evaluation of content and face and validity. Thirty-five state and county faculty participated in pilot testing the instrument. Suggested changes, clarifications, and improvements were subsequently incorporated into the instrument prior to its actual use.

In February of 2000, the questionnaire was mailed to 422 county and state Extension faculty. Following the total design method (Dillman, 1978), a postcard follow-up and a second mailing of the instrument was conducted in March. A third mailing was not initiated because the targeted instrument precision level of +/- 3 percent was achieved and time constraints did not allow for further follow-up. Results from the survey were reported at the annual Florida Associations of Extension Professionals meeting, which created the time barrier. There were 314 completed and usable questionnaires, for a 74 percent response rate. Subsequent data analysis showed no significant differences among early and late respondents.

Multiple linear regression with ordinary least squares (OLS) was employed for this analysis. OLS regression enables the modeling of the dependent variable as a function of the independent variables. Two models were utilized to determine the combined effect of each set of variables (work place skills, and individual and household demographics) on the dependent variable (stress). In the following analyses, the work place skills variables (workday planning, time pressure, and managing others) were entered in model one, with the seven individual and household demographic items (age, income, gender, house work, time spent with family, working partner, and state or county appointment). Finally, the reduced model containing all of the statistically significant independent variables was examined.

Results

Objective A: Development Of Indices Of Stress And Workplace Habits

Table One shows selected demographic variables of the study respondents. An even

number of males and females responded to the study, which reflects the current makeup of University of Florida Extension faculty. The majority was married (78.4&.) and most (82.0%) of their spouses/partners also worked. Total household income was well distributed, and the modal category was above $75,000 per household. Most of the respondents were county faculty (71.8%) as compared to state faculty (24.8%). Average faculty age was 46 years. On average, respondents felt that they spent about 30 hours per week with their family.

The dependent variable for this study was an overall stress index score derived from a summation of eight items as measured by a five point Likert-type scale. These items were adapted from a stress index used in the Health Opinion Survey, which is administered periodically by the National Institute of Health. The eight items included:

1) My life is filled with stress.
2) At the end of most days, I feel frustrated because I did not accomplish all that I planned to do.
3) I find myself trying to be everything to everybody.
4) My physical health is affected by stress in my life.
5) My life is a series of crises.
6) I have difficulty setting aside time for desired activities with my family or partner.
7) I feel overwhelmed by the amount of work that is expected of me.
8) I am hardly ever satisfied with my achievements.

Factor analysis was conducted to establish the unidimensionality of the index. A single factor solution was derived with an Eigenvalue of 3.58, which explained 47 percent of the variation within the model. The factor analysis of the indexed items was unidimensional and can be summed reliably. Alpha reliability for this index was .83. Each respondent's individual perceived stress index score was computed as the mean of the responses to the eight questions.

Table 1
Selected demographic characteristics of study participants

Characteristic	Frequency	Percent
Gender		
Male	157	50.0
Female	157	50.0
	314	100.0
Martial Status		
Married	246	78.4
Separated/divorced/widowed	29	9.1
Single	39	12.5
	314	100.0
If married, does your spouse/partner work?		
Yes	202	82.0
No	42	18.0
	246	100.0
Level of household income		
Less than $30,000	20	6.3
$30,000 to $44,999	55	17.4
$45,000 to $59,999	49	15.7
$60,000 to $74,999	71	22.6
Over $75,000	119	38.0
	314	100.0

Table Continues

Table 1 Continued

Characteristic	Frequency	Percent
Area of Appointment		
County	225	71.8
State	78	24.8
Other	11	3.4
	314	100.0
Satisfaction with amount of housework done at home		
Very satisfied	39	12.3
Satisfied	109	34.6
Dissatisfied	120	38.4
Very dissatisfied	46	14.7
	314	100.0
Number of children under 18 years of age		
Mean = 2.13 SD = 0.9		
Average time (hours) spent with family per week		
Mean = 30.8 SD = 19.9		
Age of respondents		
Mean = 46 SD = 10		

Response categories consisted of 1) strongly disagree, 2) disagree, 3) neutral, 4) agree, and 5) strongly agree. By computing the mean of the eight items in the index, the meaning of the index score is readily interpretable. For example, a mean score of '4' for the eight items means that the respondent tended to agree with each item. Subsequently, the mean of all the respondents' perceived stress index scores was taken. The mean of all the respondents' scores for the dependent variable was 3.02 with a standard deviation of .70.

Based upon this mean score, it was determined that faculty on average were neutral in regard to their overall levels of stress. However, the standard deviation of the index indicates that some faculty have stress under control while approximately half perceive higher levels of stress. Mean differences indicated that county faculty perceived slightly higher stress than state faculty, but this was not statistically significant.

Objective B: Establishing The Relative Strength Of The Variables In The Model

The independent variables used in this study were first identified in the literature as factors related to stress. Measures of these variables were adapted from other studies (Aneshensel, 1992; Krannich et al., 1988, Perlin, 1989). These variables were blocked into two logical categories (Work Place Skill and Demographics) to help explain probable causes of stress. Table 2 shows each of the four items utilized in the index and the summary results establishing uni-dimensionality.

Table 3 presents the results of the multivariate analysis for this study, and the full model is presented with all variables placed in the model. The first variable, workday planning was statistically significant. As respondents reported greater use of things like "to do" lists, formal planning, and planning for meetings, stress scores tended to be lower. A similar pattern was observed for the variable managing others, but this relationship was not statistically significant. Time pressure was the most important variable in the model. This indicated that if respondents agreed more with the variables of being over-committed, continuous multi-tasking, working late, and feeling like they were always racing against the clock their stress scores tended to be much higher.

Seven items related to household and individual demographics were asked. One

demographic item was statistically significant, time spent with family. Respondents who spent more time with their family tended to report less stress. The other items in this block were not statistically significant. The explained variation in this model was 40 percent.

The reduced model contains only those variables that were statistically significant in the full model. The three variables in this model explained 37 percent of the variation. The items related to workday planning and time pressure remain statistically significant and relatively important in the model (as observed in the standardized Betas). Time pressure is by far the strongest explanatory variable in the model, followed by workday planning, and time spent with family. The adjusted R^2 for this model is impressive, considering the initial number of variables and the fact that in the stress literature, more complex models rarely explain 30 percent of the variation (Aneshensel, 1992).

Table 2
Blocks of independent variables utilized in the factor analysis

Blocks, items measured and results of factor analysis by block.

Work place skills

A. Work day planning / preparation

1) I do formal planning for complex tasks.
2) I prepare to get the most out of meetings.
3) I work effectively while traveling.
4) I procrastinate.
5) I have a prioritized "to do" list.
6) I schedule important work for the time of day when I am most effective.
7) I plan my work, and work my plan.

* Factor analysis yielded an Eigenvalue of 3.54, which explained 47 percent of the model variation. Alpha index reliability = 0.77. Mean Work Day Planning score = 3.52, SD = 0.58 of 5-point Likert-type scale: 1) Never, 2) Seldom, 3) Half of the time, 4) Often, 5) Always.

B. Time pressure

1) I seem to be in a hurry and racing against the clock.
2) I find myself doing two or three things at one time, such as eating lunch and writing a memo, while talking on the phone.
3) I over-commit myself by biting off more than I can chew.
4) I find myself continuing to work after my coworkers have called it quits.

* Factor analysis yielded an Eigenvalue of 3.27, which explained 43 percent of the model variation. Alpha index reliability = 0.65. Mean Time Management score = 3.73, SD = 0.75 of 5-point Likert-type scale: 1) Strongly Disagree, 2) Disagree, 3) Neutral, 4) Agree, 5) Strongly Agree.

C. Managing others

1) I handle casual visitors effectively.
2) I control distractions.
3) I delegate effectively.

* Factor analysis yielded an Eigenvalue of 3.31, which explained 57 percent of the model variation. Alpha index reliability = 0.57. Mean Managing Others score = 3.31, SD = 0.59 of 5-point Likert-type scale: 1) Never, 2) Seldom, 3) Half of the time, 4) Often, 5) Always.

Table Continues

Table 2 Continued

Blocks, items measured and results of factor analysis by block.

Perspectives on work

A. Work addiction

1) I prefer to do most things myself rather than ask for help.
2) I feel guilty when I am not working on something.
3) It is hard for me to relax when I'm not working.

* Factor analysis yielded an Eigenvalue of 3.04, which explained 40 percent of the model variation. Alpha index reliability = 0.58. Mean Work Addition score = 3.04, SD = 0.84 of 5-point Likert-type scale: 1) Strongly Disagree, 2) Disagree, 3) Neutral, 4) Agree, 5) Strongly Agree.

B. Job Satisfaction

1) I feel that my working conditions are good.
2) Considering my job responsibilities, there is no way I could do my job properly.
3) My work brings me satisfaction.

* Factor analysis yielded an Eigenvalue of 2.93, which explained 39 percent of the model variation. Alpha index reliability = 0.55. Mean Work Addition score = 3.53, SD = 0.49 of 5-point Likert-type scale: 1) Strongly Disagree, 2) Disagree, 3) Neutral, 4) Agree, 5) Strongly Agree.

Table 3
Results of multivariate analysis categorized by block

	Full Model			Reduced Model		
	b	B	SE*b*	*b*	B	SE*b*
Work Place Skills						
Work day planning	-.249*	-.201	.077	-.293*	-.241	.061
Time pressure	.481*	.508	.055	.483*	.515	.047
Managing others	-.009	-.079	.082			
Demographics						
Age	.001	.090	.005			
Income	.003	.050	.045			
Gender	-.008	-.057	.09			
House work	-.004	-.061	.048			
Time spent w/family	-.005*	-.133	.002	-.005*	-.144	.002
Partner works	.003	.018	.109			
State or county appointment	-.163	-.102	.100			
Constant	2.351*					2.375*
Adj. R^2	.40					.37

*p<.05

Conclusions

The results of this study confirm that stress exists among Extension faculty, substantiating the findings of other authors who have written about stress and balancing work and family for Extension professionals (Fetsch & Pergola, 1991; Riggs & Beus, 1993; Fetsch & Kennington, 1997). Because of the nature of Extension, there is always going to be a certain level of stress from dealing with wide varieties of constituencies and program requirements. This study has served to delineate a number of factors that are directly correlated to stress for Extension faculty and staff.

The results showed that the index related to time pressure was the strongest explanative variable. The more faculty reported that they were over-committed, worked late, constantly multi-tasked, and felt like they were continuously racing against the clock, the greater their stress scores. On the other hand, those faculty who were able to manage their day and minimize time pressure experienced lower stress. Similar direct correlations were noted with managing others (though not significant), scheduling and planning. Those who had not mastered planning, scheduling (to-do lists), delegating, and controlling distractions had significantly higher stress scores versus those who were adept with these traits and skills.

As in other studies (Mackenzie, 1972), workday planning was found to be of great significance, and this was found to be an important item in regards to overall stress for Extension educators. In one respect, these results are actually very encouraging in that most of these skills can be improved upon through professional development. Training programs and inservices focusing on workday planning, which are frequently effective in changing knowledge, skills and behaviors, can be implemented (Abernathy, 1999; Douglas & Douglass, 1980; Mackenzie, 1972).

Improvement in the areas of workday planning by Extension professionals would constitute a tripartite benefit. First, the Extension organization would realize a significant benefit from improved employee productivity and efficiency in addition to improved morale leading to greater work satisfaction and less employee attrition. Secondly, Extension professionals would have a direct benefit from feeling less stress and pressure, bringing about greater personal satisfaction and less burdensome attitudes (Kirkpatrick et al., 1996). They would feel much better about themselves and their career. Lastly, Extension professionals would experience an indirect benefit of more personal time. This time could be invested in developing and nurturing family relationships and personal interests, bringing about greater individual and family appreciation and gratification.

The block of household and individual variables provides some very interesting insight into how Extension faculty cope with stress. Faculty who reported more time with family exhibited less stress as compared to cohorts. It was theorized that faculty who spent time with their family tended to emphasize the importance of time with their family. Time spent with family served as a coping mechanism for minimizing stress for these Extension faculty (Pearlin, 1989).

Recommendations

Stress, time management, and balancing work and family continue to be issues for Extension and its people. The demands are great for Extension professionals to meet clientele needs and document widespread impact and change. Extension as an organization must address these issues for the long-term best interest of the organization. Greater organizational effectiveness can be achieved through employees being able to manage stress and work pressure with positive workplace skills. Proactive professional development in these areas would be very beneficial, and as such, is highly recommended. Training needs to be offered to existing faculty as well as new faculty as they enter the system. We recommend that all faculty be trained in time management and work-place skills even though only half the faculty indicated that stress is an issue. This is because all faculty will experience work-place stress in their career. Additionally, if the organization were to use a screening instrument to identify faculty who currently experience stress and require them attend training there would tend to be a negative

stigma attached to participation in the training. Further, the adoption of universal training on work-place stress recognizes and emphasizes the relationship of individual well being to work place productivity.

This study has clearly documented the significance of time and work management on workplace stress. Proactive workday planning, scheduling, and management were highly correlated with less individual stress. Through professional development efforts, positive changes are possible for individuals among these competencies. The ascribed need for training on these topics among Extension professionals is critical.

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