

DOCUMENT RESUME

ED 474 282

CE 084 641

TITLE Learning and Job Satisfaction. Symposium.
REPORT NO No-5
PUB DATE 2002-00-00
NOTE 24p.; In: Academy of Human Resource Development (AHRD) Conference Proceedings (Honolulu, Hawaii, February 27-March 3, 2002); see CE 084 635.
PUB TYPE Reports - Research (143) -- Speeches/Meeting Papers (150)
EDRS PRICE EDRS Price MF01/PC01 Plus Postage.
DESCRIPTORS Adult Education; Developed Nations; Developing Nations; Educational Needs; Employee Attitudes; *Extension Agents; *Family Work Relationship; Foreign Countries; Inplant Programs; *Job Satisfaction; *Job Training; *Labor Force Development; Nontraditional Students; *Participant Satisfaction; Small Businesses
IDENTIFIERS Taiwan; Tennessee; United States

ABSTRACT

This symposium is comprised of three papers on learning and job satisfaction. "The Relationship Between Workplace Learning and Job Satisfaction in United States Small to Mid-Sized Businesses" (Robert W. Rowden) reports findings that revealed sufficient evidence to conclude that learning is pervasive in the small to mid-sized businesses studied; small businesses have a substantial amount of human resource development occurring in the workplace; a large part of the workers' sense of job satisfaction comes from workplace learning; and workplace learning has linkages to an employee's satisfaction with his or her perception of recognition. "Can One Size Really Fit All? A Study of the Relationship Between Learning Needs and Learning Satisfaction of Nontraditional Students in Taiwan" (Hui-Chin Chu, Chi-Jung Fu) presents findings that participants with stronger desire for improving their competence tended to have higher satisfaction toward environment-related factors, and those who had more desire for self-accomplishment and social needs were satisfied with instructional- and interpersonal-related factors. "Work/Family Variables Influencing the Work Satisfaction of Tennessee Extension Agents" (April B. Martin, Michael Lane Morris) concludes from the study that the life and parental satisfaction scores of the agents were the only predictors for work satisfaction, and work satisfaction was not predicted by marital satisfaction or the selected demographic variables, including job title, gender, income, employment responsibility, years in present position, length of marital status, age, and education. All papers contain substantial references. (YLB)

Reproductions supplied by EDRS are the best that can be made
from the original document.

PERMISSION TO REPRODUCE AND
DISSEMINATE THIS MATERIAL HAS
BEEN GRANTED BY

*Rowden/Chen/
Martin*

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)

1

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

- This document has been reproduced as received from the person or organization originating it.
 - Minor changes have been made to improve reproduction quality.
-
- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

2002 AHRD Conference

Learning and Job Satisfaction

Symposium 5

Honolulu, Hawaii

February 27 - March 3, 2002

BEST COPY AVAILABLE

The Relationship Between Workplace Learning and Job Satisfaction in U.S Small to Mid-Sized Businesses

Robert W. Rowden
Mercer University—Atlanta

Although a great deal of attention is given to HRD in Fortune 500-type firms, little is known about the nature and extent of workplace learning in small to mid-sized businesses in the United States. Also, workers in SMEs have been found to have higher levels of job satisfaction than do workers in large organizations. This study measures the nature and extent of workplace learning in SMEs; delineates the nature and extent of job satisfaction; and examines the relationship between them.

Key Words: Workplace Learning, Job Satisfaction, Small Businesses

By any measure, small to mid-sized businesses are critical to the economic well being of the United States. They create new businesses (and the new jobs that go with them); bring new and innovative services and products to the marketplace; and provide business ownership opportunities to diverse (and traditionally underrepresented) groups (Headd, 2000). Of the approximately 5,797,500 U. S. businesses with employees in 2000, roughly 99.7 percent were small to mid-sized businesses (2001 Small Business Profile, U.S. Small Business Administration). Not only do these small to mid-sized business create a wide variety of jobs for the employment sector, but they also keep the U.S. economy churning (Headd, 2000).

Small businesses are playing an increasingly important role in the world economy as well. Small businesses (those employing 100 people or less) "are responsible for 82 percent of the jobs created in the United States" (Megginson, Scott, Trueblood, & Megginson, 1995, p. 247). Yet, of the more than 600,000 small businesses started each year in the U.S., 80 to 85 percent fail in the first five years (Small Business Handbook, 1990). The economic well-being of some regions of the United States is dependent upon small businesses where the majority of businesses (88 percent) employ fewer than 200 people (U.S. Department of Commerce, (1990-91).

Even so, it seems that even defining what constitutes a small business is not without difficulty. The U. S. Small Business Administration defines a small business as one having fewer than 500 employees in the manufacturing and mining sector, and 100 employees for all wholesale trade industries (Headd, 2000). Storey (1994) reports that the European Commission breaks the definition into three components based on number of employees: *micro-enterprise* with between 0 and 9 employees; *small enterprise* with between 10 to 99 employees; and *medium enterprise* with 100 to 499 employees. A later report by the European Commission redefined its original categories as: *micro-enterprise* with between 0 and 9 employees; *small enterprise* with 10 to 49 employees; and *medium enterprise* with 50 to 249 employees (Curran, Blackburn, Kitching & North, 1996). The U. S. Department of Commerce (1990-91) discusses small businesses in terms of businesses with fewer than 200 workers. Others, for example Megginson, Scott, Trueblood, and Megginson (1995) and Daly and McCann (1992), define small businesses as those with 100 or fewer workers. Despite the varied definitions and regional differences, the most consistent definition of small to mid-sized businesses seems to be a business with fewer than 200 employees.

Regardless of how small to mid-sized businesses are defined, certainly, they are a dynamic force in the economy, bringing new ideas, processes, and vigor to the marketplace. They fill niche markets and locations not served by larger businesses. Small firms are often younger than large firms, more likely to be outside major urban areas, and more apt to be in industries with lower economies of scale such as service. Small firms can represent a life stage before economies of scale are reached (or hoped-for future growth is attained), or they can be a stable anchor in the marketplace. These age, location, and industry effects constitute the basic differences between small and large businesses and can lead to different workforce needs and different resources to attract workers of various education levels and occupations (Anderson & Skinner, 2000).

Increases in competition, globalization, and the speed of change have helped to highlight the importance of the capacity for learning in small to mid-sized businesses as a key to both survival and success (Dumphy, Turner & Crawford, 1997; Easterby-Smith, Snell & Gehardi, 1998; Fulmer, Gibbs & Keys, 1998). The capacity to learn is one of the fundamental attributes of human beings and involves them developing and changing as time passes (Arnold, Cooper & Robertson, (1995). Much of this development is informal and randomly experienced, a feature highlighted particularly in Kolb's experiential model of learning (Kolb, 1984). Marquardt (1996) argues that learning (as distinct from training or instruction) assumes continuous change and focuses on values, attitudes, and innovation.

Copyright © 2002 Robert W. Rowden

Developing the human resources of a company would seem to be key to increasing production and closing the gap between the level of worker skill and present and future needs. Businesses that have made learning, education, and development a priority have seen it pay off through greater profitability and increased worker job satisfaction (Coblentz, 1988; Filipczak, 1989). Recent studies have found that job satisfaction is rarely tied to pay and promotion; but rather, workers are more interested in such things as feeling appreciated, being "in on things," and career development (Buhler, 1994; Dolan, 1996) all of which have linkages to workplace learning.

Job satisfaction is simply how people feel about their jobs and different aspects of their jobs. There are important reasons why organizations should be concerned with job satisfaction. First, the humanitarian perspective is that people deserve to be treated fairly and with respect. Job satisfaction is to some extent a reflection of good treatment. It also can be considered an indicator of emotional well being or psychological health (Haccoun & Jeanrie, 1995). Second, the utilitarian perspective is that job satisfaction can lead to behavior by employees that affects organizational functioning, as well as a reflection on organizational functioning. Differences among organizational units in job satisfaction can be diagnostic of potential trouble spots (Beatty, 1996). Each reason is sufficient to justify concern with job satisfaction. Combined they explain and justify the attention that is paid to this important variable.

Indeed, Buhler (1994) emphasizes the point when she talks about the continued effort organizations must place on employee satisfaction and the economic importance to the company. "Organizations that believe that workers are easily replaced and do not invest in their workers send a dangerous message. This often results in high turnover, which is accompanied by high training costs, as well as hiring costs. . . .It fosters the same type of attitude in the employee, that the company can be replaced and little loyalty is felt" (1994, p. 10). Even in times of near-full employment, these studies make it clear that companies must take advantage of all workplace learning opportunities if they are to remain successful.

However, until recently, most studies of workplace learning like the ones by Coblentz (1988), Beatty (1996), and Hitt (1998), for example, have been conducted in large corporations. Few firms in the samples have had annual sales of less than US\$1 billion. Most U.S. businesses are small to mid-sized with annual sales well under US\$10 million (Anderson & Skinner, 1999; Lee, 1991). How learning is orchestrated and how skills and knowledge are acquired and developed in small to mid-sized organizations should be matters of major interest. There has been little attempt in the HRD literature to differentiate between larger and smaller organizations and to address the impact that size and associated resource constraints might have upon both actual and desired approaches to workplace learning. Most of the mainstream literature seems to have assumed that HRD activities take place in organizations where training, development, and learning issues are addressed by specialist staff operating within a dedicated functional unit. The majority of small to mid-sized businesses have no such specialist function or department, and not even a dedicated member of management or staff (Walton, 1999).

To date, little is known about the relationship between workplace learning and employee satisfaction in small to mid-sized companies. Studies by Des Reis (1993) and Rowden (1995) have found that such firms may not even be aware of the nature and extent of learning in their workplaces. Yet it is likely that the success of such companies is at least attributable to the ways in which employees are attended to, formally and informally trained, and developed.

Statement of the Problem

Conventional wisdom says that small businesses do not have the financial resources nor the time to do very much, if any, human resource development or workplace learning. These views on training in small businesses have generally been supported each time quantitative research has been conducted in a variety of small businesses. However, a qualitative study (Rowden, 1995) found that, in fact, U.S. small businesses do engage in a considerable range of formal, informal, and incidental workplace learning activities. The information gleaned from the interviews, observations, and documents provided the foundation upon which a questionnaire for assessing the extent of workplace learning from a perspective that small businesses truly understand. In fact, a study by Rowden and Ahmed (2001) employing the questionnaire in Malaysia further established the presence of workplace learning in small to mid-sized businesses.

We have known for some time that more learning occurs in the workplace than just what happens in formal training classrooms. Watkins and Marsick (1992) have identified the different forms of workplace learning as formal, informal, and incidental. Formal learning (training), of course, is discrete planned events (experiences) used to instruct people how to perform specific defined jobs. Informal learning is defined as any learning that occurs in which the learning process is not designed or determined by the organization. Formal learning includes both an expressed organization goal and a defined process. Informal learning can occur whether or not there is an expressed goal, and can serve individual as well as corporate objectives. For example, informal learning might best occur

when a coworker shows a new employee how to use a machine through an actual demonstration rather than through a classroom presentation. Although interconnected, informal and incidental learning are not necessarily the same. Incidental learning occurs as an unintended by-product of some other activity such as trial-and-error experimentation. The intention of the activity is task accomplishment, but serendipitously increases particular knowledge, skills, or understanding. Formal and informal learning tend to be intentional whereas incidental learning is not. Learning, as opposed to training, is more appropriate to a business environment in which jobs are constantly changing (Marsick & Volpe, 1999).

Another recent study (Anonymous, 1997) found that workers in U.S. small businesses were generally more satisfied with their employment situation than were workers in larger companies. The study found that 44 percent of the workers in small businesses said they were "extremely satisfied" with their jobs, compared with 28 percent at companies with 1,000 or more workers. It was speculated that factors such as job security, empowerment, and the ability to do what they do best might explain job satisfaction. While workplace learning was not one of the indicators in the study, the respondents reported that they could learn and grow on the job.

An assumption of this study is that a sense of satisfaction a person feels about his or her employment can be directly linked to the three types of workplace learning. That is, employees who have opportunities to grow and learn in their job will express higher levels of job satisfaction. To test this assumption, this study first established the nature and extent of workplace learning in small to mid-sized businesses; established the level of job satisfaction reported in the same small to mid-sized businesses; and established the relationship between these learning opportunities and the level of employee satisfaction in these organizations.

Purpose and Research Questions

The overall purpose of this study is to understand workplace learning in the context of the small to mid-sized business. The specific research questions are:

1. What is the nature and extent of workplace learning in small to mid-sized businesses?
2. What is the relationship among three types of workplace learning (formal, informal, and incidental) in small to mid-sized businesses?
3. To what extent do those three types of workplace learning explain job satisfaction?

Methodology

The qualitative study by Rowden (1995) was successful in identifying the key concepts of workplace learning in small to mid-sized businesses. A quantitative study was deemed to be an appropriate way to operationalize those findings. Since a survey provides a means to capture large amounts of data over a wide range of possibilities, an instrument was developed that captures the essence of the findings on workplace learning revealed by the Rowden (1995) study. The resulting survey instrument was combined with the Spector Job Satisfaction Survey (1997) in order to measure the level of job satisfaction in the same organizations.

To aid in the investigation of the possible relationships among the types of workplace learning and the constructs of job satisfaction without trying to influence those variables, a correlational procedure was deemed the most appropriate statistical technique. Correlational procedures show the extent to which change in one variable is associated with change in another variable. When a correlation is found to exist between two variables it means that scores within a certain range on one variable are associated with scores within a certain range on the other variable (Fraenkel & Wallen, 1996). Using a correlational (Pearson r) procedure establishes the relationship among the variables for workplace learning and job satisfaction.

Description of the Sample

Twelve small to mid-sized companies agreed to participate in the study. Participating companies were located through a variety of methods including personal contacts, colleagues, and "cold calling." A total of 439 surveys were returned. The 6 companies consisted of a timber products company (102), a manufacturing company (89), a healthcare facilities (61), an engineering firm (53), a paving contractor (78), and a general construction firm (56).

Over ninety percent of the respondents work full time. Nearly sixty-eight percent are male. Seventy-five percent are between the ages of 19 and 49. Sixty-eight percent are married. Nearly fifty percent work at companies with fewer than 100 employees and nearly eighty percent work for companies that employ less than 150 employees. Over eighty percent have been employed by their current company for less than 10 years. Just over seventy percent

are non-supervisory and over seventy-five percent earn more than \$10 per hour. Forty-seven percent work in service industries while thirty-two percent work in manufacturing.

Instrument

There is limited research on HRD in small to mid-sized businesses. Most people believe that small businesses do little, if any, development of their workers. For example, *Training Magazine*, which annually conducts a study of the training industry in the U.S., does not even attempt to contact businesses with fewer than 100 employees and only 16 percent of their sample consist of companies with between 100 and 500 workers.

Several attempts have been made to determine the nature and extent of workplace learning in small business. Invariably, the studies concluded that, in fact, little HRD occurs in small businesses (for example, Des Reis, 1993; Hill & Stewart, 1999). A review of several of the studies determined that a likely cause of the lack of discovery of workplace learning in small businesses was due to the design of the surveys. A qualitative study by Rowden (1995) did reveal numerous indices of workplace learning in small to mid-sized businesses. By looking at the field notes and transcripts of interviews of workers, it was believed that previous attempts to capture workplace learning in small to mid-sized businesses was due in large part by the language of the questionnaire. Making every attempt to stay as close as possible to the language and references used by actual workers in small to mid-sized businesses, a survey was developed to attempt to capture the nature and extent of workplace learning in these businesses.

The research on job satisfaction in small businesses mirrors that of HRD in small businesses. Until a study by Anonymous (1997), little attention had been paid to worker job satisfaction in small businesses. This study found that workers in small businesses, generally, were more satisfied with their work than were workers in larger businesses. The study did not, however, seek to determine *why* the workers were more satisfied. The study mentioned ideas like better communication, a feeling of being in on things, and a smaller power distance—but no factors were actually measured. Again based on the Rowden (1995) study, a possible connection could be made between workplace learning and job satisfaction. To determine if this hypothesis were true, workplace learning and job satisfaction would have to be measured in the *same* small businesses. Then, correlational measures could be made to determine if small to mid-sized businesses with high measures of workplace learning *also* had high measures of job satisfaction. The Spector (1997) Job Satisfaction Survey was determined to be the best-validated and reliable instrument for determining job satisfaction. A modified version was incorporated into the questionnaire along with request for background data. Once developed, the *Small Business Workplace Learning Survey (SBWLS)* was subjected to critique sessions by content area experts as well as graduate HRD classes to ensure for content validity. The process was continued until saturation was reached; that is, until no more distinct categories could be ascertained.

The result of the development process was a six page self-administered questionnaire that utilized a 16 (Disagree Very Much—Agree Very Much) Likert scale. The instrument is divided into three sections—workplace learning, job satisfaction, and background information. The three constructs or independent variables for the workplace learning portion were formal, informal, and incidental learning. The reliability for each measure was conducted using Chronbach's alpha. The *formal* learning scale (6 items, alpha = .81) included items measuring respondent's perceptions of planned, organized, training activities. The *informal* learning scale (8 items, alpha = .73) included items measuring respondent's perceptions of unplanned or spontaneous activities that lead to perceived learning on the job. The *incidental* learning scale (7 items, alpha = .78) included items designed to measure respondents perception of normal workplace activities that resulted in learning even though that was not the purpose of the activity. The *overall* learning scale (all 21 items, alpha=.89) combines the three aspects of workplace learning.

The Spector Job Satisfaction Survey (1997) was embedded into the instrument. The 27 items were designed to measure nine separate aspects of job satisfaction. However, after the data collected were subjected to preliminary analysis, it was found that none of the nine measures yielded adequate reliability. This may have been because some items on the JSS carry different meanings in different businesses, or it could simply be an artifact of too few indicators per construct being measured. Consequently, it was decided to subject those 27 items to exploratory factor analysis to determine the underlying constructs that constituted those nine measures. During this process, numerous solutions both octagonal and oblique were explored ranging from two through eight factor solutions. The ultimate criteria were conceptual meaningfulness.

As a result of the exploratory factor analysis of job satisfaction, the dependent variables were identified as *supportive environment*, *recognition*, *benefits*, and *enjoyment*. The items comprising each of these factors were combined into additive indices and the reliabilities were calculated. *Supportive Environment* (11 items, Chronbach's alpha = .88) included items measuring meaningful work, feeling "in" on things/knowing what is going

on, and satisfaction with the quality of supervision. *Recognition* (6 items, Chronbach's alpha = .76) included items measuring communication, getting ahead, and promotion. *Enjoyment* (4 items, Chronbach's alpha = .75) measured if the respondent liked his or her work, supervisor, and coworkers. *Benefits* (4 items, Chronbach's alpha=.72) included items measuring satisfaction with benefits, and if the benefits were equitable. The *overall* measure of job satisfaction received an alpha of .83.

The third section of the instrument contains nine ordinal and nominal scale items designed to capture additional information about the respondents. These items were also subjected to analysis with some minor correlations noted. However, they were not germane to the study and are not reported here.

Table 1. *Workplace Learning Responses*

	N	% Responding 5 or 6 (top of Agree Scale)	Mean	Std Deviation
<i>Incidental</i>				
Q5	431	51.2	5.10	1.01
Q6	427	49.8	4.95	1.30
Q9	429	65.6	4.90	1.41
Q14	425	41.5	4.33	1.48
Q18	416	45.1	4.85	1.45
Q20	430	46.8	4.74	1.39
Q21	427	45.9	3.95	1.93
<i>Informal</i>				
Q1	438	59.9	4.95	1.36
Q4	436	35.4	5.08	1.23
Q7	419	54.4	4.51	1.46
Q8	414	39.3	4.80	1.38
Q10	409	30.0	5.09	3.40
Q13	424	43.7	4.33	1.62
Q15	410	51.1	4.31	1.58
Q17	413	49.7	4.21	1.66
<i>Formal</i>				
Q2	416	26.7	3.86	2.02
Q3	436	45.3	4.32	1.65
Q11	421	32.2	3.66	1.80
Q12	420	23.1	4.00	1.82
Q16	408	29.2	3.48	1.94
Q19	430	40.3	4.53	1.57

Data Analysis

The data were analyzed in a variety of ways. First, simple descriptive statistics (means; measures of variation—standard deviations; frequencies) were employed for the surveys from each company to determine the nature and extent of workplace learning in the companies. Then, the Pearson product-moment correlation was conducted to determine the inter-correlation among the three types of learning, and to determine the strength of the relationship between workplace learning and employee satisfaction across the companies.

In order to assess the relationship among the three types of workplace learning, two different analyses were conducted. In the first analysis, the mean-item mean for each of the three was calculated and compared so that the relative extent of each can be compared. The inter-correlation among the three was examined. They were different but related, which is what one would expect.

In order to answer research question 3, the correlation between the three workplace learning measures and the five (4 + overall) job satisfaction measures were examined. Additional analyses examined the relationship between background variables and measures of job satisfaction and workplace learning.

Findings

Examination of the responses on the *SBWLS* revealed sufficient evidence to conclude that learning is pervasive in these small to mid-sized businesses. Table 1 shows the means, standard deviations, and percent responding at the top of the "Agree Scale." The means and standard deviations indicate strong positive responses to the questions in all three arenas of learning. Findings support the notion that small businesses have a substantial amount of human resource development occurring in the workplace. In fact, the only questions that received somewhat low ratings dealt with whether or not the organizations reimbursed tuition for formal education and professional organizations. All other questions dealing with formal, informal, and incidental learning received strong support from the respondents.

The formal, informal, and incidental learning measures were examined for the mean item effect. The mean-item means are: *informal* = 4.66; *incidental* = 4.69; *formal* = 3.98. Incidental learning has a greater place in the workplace by these numbers, followed closely by informal learning. Table 2 shows the inter-correlation among the three workplace learning variables which is further evidence of validity. These measures provide further understanding of the nature and extent of workplace learning in small to mid-sized businesses.

Table 2. *Intercorrelation Among Three Types of Learning*

		Incidental	Informal	Formal
Incidental	Pearson r	1.000	.830**	.478**
Informal	Pearson r		1.000	.624**
Formal	Pearson r			1.000

** . Correlation is significant at the 0.01 level (2-tailed)

Table 3 shows the relationship between workplace learning and job satisfaction. All three measures of workplace learning were significantly correlated with each of the four measures of job satisfaction. Certain background variables exhibited weak but significant correlations with the three forms of workplace learning, and the four variables of job satisfaction. They were not included as part of this discussion.

These findings have a profound bearing on our understanding of workplace learning in small businesses. It also establishes strong linkages between workplace learning and job satisfaction in these same small to mid-sized businesses. The summary of the relationships contained in Table 3 are key to this new understanding.

Table 3. *Relationship Between Workplace Learning Measures and Job Satisfaction Measures*

		Incidental	Informal	Formal
Supportive	r =	.285**	.287**	.134*
Environment	r ² =	.08	.08	.02
Recognition	r =	.644**	.579**	.382**
	r ² =	.41	.34	.15
Enjoyment	r =	.272**	.278**	.168**
	r ² =	.07	.08	.03
Benefits	r =	.153**	.204**	.280**
	r ² =	.02	.04	.08
Overall Job Sat	r =	.440**	.441**	.302**
	r ² =	.19	.19	.09

** . Correlation is significant at the 0.01 level (2-tailed)

* . Correlation is significant at the 0.05 level (2-tailed)

The coefficient of determination of the three types of learning as they relate to overall job satisfaction, allow us to predict that 19 percent of the overall job satisfaction these workers experienced is accounted for by Informal learning; that another 19 percent is accounted for by Incidental learning; and that 9 percent of the variance is accounted for by Formal learning. This indicates that a large part of the workers sense of job satisfaction comes from workplace learning. While other factors affect job satisfaction, no other known study has so directly tied a satisfied workforce to the learning that occurs within the work setting.

This study also indicates that workplace learning has linkages to an employee's satisfaction with his or her perception of *recognition*. The coefficient of determination allow us to predict that 41 percent of the satisfaction

with being recognized for a job well-done is accounted for by Incidental learning; that 34 percent is accounted for by Informal learning; and 15 percent is accounted for by formal learning. This supports the belief that workplace learning positions one for advancements that lead to recognition, promotion, and pay increases.

The mean-item means analysis indicates that of the three measures of workplace learning, incidental learning has the greater place among them. Again, this has significance as to where we place our time and money. Formal learning—the one that gets all the attention and money—has the lowest place of the three.

Conclusion and Discussion

Previously, conventional wisdom has held that small to mid-sized businesses do little to develop the human resources in their organizations. This study does not support that thinking. The respondents in this study reported extensive incidents of formal, informal, and incidental learning in the workplace, with incidental learning having the greater place among them. In addition, the respondents also reported a feeling of overall job satisfaction with recognition, work enjoyment, benefits, and supportive work environment a big part of their perception of satisfaction. Not only that, they attributed a large part of their job satisfaction to the availability of learning opportunities on the job.

These findings have some significant implications for theory and practice:

- No longer can there be denial that the development of human resources occurs in small businesses. Studies such as the ones by Des Reis (1993), Morse (1984), and *Training* (1998) that found an absence of HRD activities in small businesses are placed in question. This study firmly establishes the nature and extent of workplace learning in small to mid-sized businesses.
- There is now support for the findings made by Anonymous (1997) in U. S. small businesses that found workers generally had a higher level of job satisfaction than did workers in large enterprises. The workers in this study indicated a very strong sense of being satisfied by the work they were doing.
- Workplace learning is now directly linked to employee job satisfaction. No known previous U.S. studies have undertaken the connection between the two variables. This can have huge implication as to where managers place their emphasis to ensure content workers. Rather than focusing almost solely on pay to enhance job satisfaction, companies can begin to focus on enhancing learning opportunities.
- Informal learning and incidental learning each have a significantly higher place in the learning network than does formal training. As Jacobs and Jones (1995), and Rothwell and Kazanas (1994) encourage, greater emphasis and financial support needs to be placed on on-the-job training as a learning tool in organizations.
- This study supports previous findings (Kovach, 1987) that being appreciated for one's work, feeling "in" on things, and enjoying the workplace and coworkers are a significant part of job satisfaction. Workers indicated that workplace learning contributed significantly to these aspects of job satisfaction.

While this study clearly does not represent the entire global workplace, even so, these findings are significant for exploring the relationship between workplace learning and employee job satisfaction. It is the first known empirical study conducted in the United States to establish the nature and extent of workplace learning in small businesses. It is also the first U.S. study to delineate the relationship between workplace learning and job satisfaction. A companion study conducted by Rowden and Ahmed (2001) in Malaysia found very similar results.

A number of practical implications can be drawn from this study that are of interest to HRD and managers in companies, small and large, in day-to-day operations. Additionally, it also establishes a new understanding for teachers of human resource development, human resource management, and management. This material provides techniques to promote operational methods to help assure organizational success.

References

- Anderson, V., & Skinner, D. (2000). Organizational learning in practice: How do small businesses learn to operate internationally? *Human Resource Development International*, 4(4), 235-258.
- Anonymous, (1997, February). Overview-Small business optimism. *Small Business Economic Trends*, pp. 1-23.
- Arnold, J., Cooper, C., & Robertson, I. (1995). *Work psychology: Understanding human behavior in the workplace*. London: Pitman.
- Beatty, C. (1996). The stress of managerial and professional women: Is the price too high? *Journal of Organizational Behavior*, 17, 233-251.
- Buhler, P. (1994, July). Motivating the employee of the 90s. *Supervision*, pp. 8-10.
- Chalkley, A. (1991). Management: The human factor. *Asian Business*, 27(11), 50-53.
- Curran, J., Blackburn, R., Kitching, J., & North, J. (1996). Small firms and workforce training. 19th National Small

- Firms Policy and Research Conference. *Proceedings*, University of Central England, pp. 499-522.
- Daly, M., & McCann, A. (1992, February). How many small businesses. *Employment Gazette*, pp. 47-51.
- Des Reis, D. (1993). *The nature and extent of training in Georgia's manufacturing industries*. Unpublished doctoral dissertation. University of Georgia: Athens.
- Dolan, K. (1996). When money isn't enough. *Forbes*, 158(12), 164-170.
- Dumaine, B. (1996, April 20). Is big still good?, *Fortune*, pp. 50-60.
- Dunphy, D., Turner, D., & Crawford, M. (1997). Organizational learning as the creation of corporate competencies. *Journal of Management Development*, 16(4), 232-245.
- Easterby-Smith, M., Snell, R., & Gehardi, S. (1998). Organizational learning: Diverging communities of practice? *Management Learning*, 29(1), 5-20.
- Fulmer, R., Gibbs, P., & Keys, B. (1998). The second generation learning organization: New tools for sustaining competitive advantage. *Organizational Dynamics*, 27(2), 6-21.
- Fraenkel, J., & Wallen, N. (1996). *How to design and evaluate research in education* (3rd Ed.). New York: McGraw-Hill, Inc.
- Haccoun, R., & Jeanrie, C. (1995). Self reports of work absence as a function of personal attitudes toward absence, and perceptions of the organization. *Applied Psychology: An International Review*, 44, 155-170.
- Headd, B. (2000, April). The characteristics of small-business employees. *Monthly Labor Review*, pp. 13-18.
- Hill, R., & Stewart, J. (1999). Human resource development in small organizations. *Human Resource Development International*, 2(2), 103-123.
- Hitt, M. (1998). Twenty-first century organizations: Business firms, business schools, and the Academy. *The Academy of Management Review*, 23(2), 218-224.
- Jacobs, R., & Jones, M. (1995). *Structured on-the-job training: Unleashing employee expertise in the workplace*. San Francisco: Berrett-Koehler.
- Kolb, D. (1984). *Experiential learning*. Englewood Cliffs, NJ: Prentice-Hall.
- Kovach, K. (1987). What motivates employees? Workers and supervisors give different answers. *Business Horizons*, 30(5), 58-65.
- Lee, C. (1991). Who gets trained in what? *Training*, 10(10), 47-59.
- Marsick, V., & Volpe, M. (1999). The nature and need for informal learning. In V. Marsick & M. Volpe (Eds.) *Informal learning on the job* (pp. 1-9). San Francisco: Berrett-Koehler.
- Marquardt, M. (1996). *Building the learning organization: A systems approach to quantum improvement and global success*. New York: McGraw-Hill.
- Megginson, L., Scott, C., Trueblood, I., & Megginson, W. (1995). *Successful small business management*. Homewood, IL: Business Publications.
- Morse, S. (1984). *Employee education programs: Implications for industry and higher education*. ASHB-ERIC Higher Education Research Report No. 7. Washington, D.C: National Institute of Education (ERIC Document Reproduction Service No. ED 258 501). "1999 Industry Report." *Training*, 33(10), 37-82.
- Rothwell, W., & Kazanas, H. (1994). *Improving on-the-job training: How to establish and operate a comprehensive OJT program*. San Francisco: Jossey-Bass.
- Rowden, R. (1995). The role of human resource development in successful small to mid-sized manufacturing businesses: A comparative case study. *Human Resource Development Quarterly*, 6(4), 355-373.
- Rowden, R., & Ahmed, Sham (2000). The relationship between workplace learning and job satisfaction in small to mid-sized businesses in Malaysia. *Human Resource Development International*, 3(3), 307-322.
- Spector, P. (1997). *Job satisfaction: Application, assessment, causes and consequences*. Thousand Oaks, CA: Sage.
- Storey, D. (1994). *Understanding the small business sector*. London: Thompson Business Press.
- Small Business Handbook (1990). U.S. Establishment and Longitudinal Microdata Film of the Small Business Database, Washington, D.C.: U.S. Government Printing Office.
- Walton, J. (1999). *Strategic human resource development*. Essex, England: Pearson Education Limited.
- Watkins, K., & Marsick, V. (1992). Toward a theory of informal and incidental learning in organizations. *International Journal of Lifelong Learning*, 11(4), 287-300.

Can One Size Really Fit All? A Study of the Relationship Between Learning Needs and Learning Satisfaction of Non-Traditional Students in Taiwan

Hui-Chin Chu, Ed.D.
Shu-Te Technical University

Chi-Jung Fu, Ed.D.
Kai Nan University

The purpose of this study was to investigate the learning needs of non-traditional adult students in college extension degree programs and the relationship between their learning needs and learning satisfactions. Participants who had stronger desire for improving their competence tended to have higher satisfaction toward environment-related factors. Those who had more desire for self-accomplishment and social needs were more satisfied with instructional -related and interpersonal-related factors. Additional findings are discussed.

Key words: Non-traditional Students, Learning Needs, Learning Satisfaction

The Taiwanese government has been making their efforts to promote adult extension education, returning education, and continuing education in order to prepare their workforce for today's highly competitive international environment. The Ministry of Education passed the "College Extension Education Implementation Statute" in 1998. College extension education, which allows universities and colleges to offer degree programs, has become one of the mainstreams of higher education in Taiwan (Ministry of Education, 2000). According to the statistics released from the Department of Education, there were 61 colleges and universities offering extension programs with 115,721 students in 2000 compared to 52 schools with 91,761 students in 1999 and 40 schools with 91,048 students in 1998 (Ministry of Education, 2000). The increasing number of extension students is an indicator that adult continuing education is getting more attentions in Taiwan.

Chinmin College is considered as one of the typical Taiwanese 2-year colleges in middle Taiwan where 3,125 students enrolled in the weekend extension degree programs during the school year of 2,000. The classes are conducted in evenings and weekends, and the students are mostly working adults. The instructors involved in these programs have experience primarily in the traditional college environment. Teaching one or two extension courses is required in order to meet their required teaching load.

The growth of nontraditional adult student enrollment in higher education demands a different and more flexible delivery system in order to meet the students' need (Chu & Hinton, 2000). However, most of the programs offered in college extension programs in Taiwan are still identical with the programs designed for traditional college students. Adult students' characteristics and needs are not taken into consideration accordingly. Thus, it raises a question: Can this "one size fits all" curriculum really fit all?

Most of the research studies in Taiwan have focused on students' satisfaction to the programs they are involved in but have not addressed the relationship between students' individual learning needs and their learning satisfaction. In order to serve these students effectively and actualize the purpose of adult education, a study in this field is needed.

Theoretical Framework

According to a survey done by Lee and Luo (1992), adult students' learning needs include improving professional skills, increasing income, pursuing personal fulfillment, and changing career and so forth. Dr. Carole Fungaroli suggested in her book *Traditional Degrees for Nontraditional Students* that adult students return to school for the following reasons: career change, better jobs, promotions, or higher income, social needs, greater self-esteem, self-fulfillment, and cognitive satisfaction (Fungaroli, 2000).

Different from traditional students, adult students return to school by their own choice; therefore, learning satisfaction is extremely important (Tzai, 1997). According to Houle (1961), learning satisfaction occurs when learning activities meet the students' goals/needs. Knowles (1970) and Tough (1982) both stated learning satisfaction occurs when the students are fulfilled and motivated when they are engaged in learning activities.

Copyright © 2002 Hui-Chin Chu and Chi-Jung Fu

There are many factors that influence learning satisfaction such as: the instructor, the contents, learning materials, teaching styles, learning climate, and curriculum (Urdu, 1979). Cheng (1983) proposed that teacher's characteristics and teaching styles, social interaction, work-related skills learning, and personal development are the factors that influence learning satisfaction. Ma (1989) believed that learner's personal factors such as: social background, psychological characteristics, learning motives; teacher's factors such as: personality, teaching styles, teaching methods, learning contents, and attitudes toward students; and school factors such as: school environment, administrative services, and policies are factors influencing students' learning satisfaction.

Research has identified adult learning barriers that cause adult students dissatisfaction to learning. Those barriers included informational barriers, procedural/institutional barriers, situational barriers, and psychological barriers. Financial barriers, which is classified as one of the institutional barriers, is one of the biggest problems for adult students' dissatisfaction (Pinkston, 1987).

Dewey, and subsequently, Knowles proposed that the adult teacher should provide physical conditions that are comfortable and conducive to interaction; accept each student as a person of worth and respects his feelings and ideas; seek to build relationships of mutual trust and helpfulness among the students by encouraging cooperative activities and refraining from inducing competitiveness and judgmentalness; and involve the students in a mutual process of formulating learning objectives (Dewey, 1933; Knowles, 1990).

Methodology

According to the information provided by Chinmin College, there were 3,125 students enrolled in the extension education programs during the school year of 2,000. Based on the suggestion of Creative Research System (2001), the sample size of 350 students was determined. "Cluster sampling" was selected as the sampling technique to ensure that the samples were equally selected based on two variables: "major" and "years in school." There were 59 classes in the programs. Six students were randomly selected from each class. Therefore, the sample size in the present study was 354 students. 294 students responded to the survey, which led to a response rate of 83 percent.

The survey questionnaire used to collect data in the present study contained 3 sections and 45 corresponding questions. These sections are demographics, learning needs (their purposes of attending extension programs), and the learning satisfactions. A five-point Likert-type scale ranged from 1 (strongly disagree) to 5 (strongly agree) was adopted in both learning needs and learning satisfaction sections. There were 15 scaled-item questions in learning needs and 22 scaled-item questions in learning satisfactions (Wiersma, 1991).

In the demographic section, there were 8 multiple-choice questions which included: (a) Gender; (b) Age; (c) Marital status; (d) Occupation; (e) Position level; (f) Personal income; (g) Major; and (h) Years in school. The learning needs section included four factors, which were: (a) Job Advancement; (b) Competency Enhancement; (c) Career Change, and (d) Self-Accomplishment. The learning satisfactions section included five factors, which were: (a) Instructional-related Factor; (b) Environment-related Factor; (c) Curriculum-related Factor; and (d) Interpersonal-related Factor.

Data Analysis

The research questions were expressed as null hypotheses. A series of descriptive analyses was conducted before an inferential statistical test for each null hypothesis. All the data were quantified with descriptive statistics by using the Statistical Package for the Social Science (SPSS), version 8.0. Inferential statistical tests (t-Test, one-way ANOVA, and Correlation) were performed to test the research questions. All of the data was tested at a significance level of .05 (Gall, Borg, & Gall, 1996).

To ensure internal consistency of the survey instrument scaled items, a series of reliability analyses were conducted. The results indicated that the survey instrument had highly reliable Coefficient Alphas with a minimum of .85 in the 15 questions of the learning needs section and a minimum of .91 in the 22 questions of the learning satisfactions section.

Factor analyses were performed on the Learning needs section and the Learning satisfactions section to reduce survey variables to a minimum number of factors. An eigenvalue cut off point of 1.0 is considered as it was the most often used (Norusis, 1990). In order to provide a better interpretation of the factor matrix, a Varimax rotation technique was conducted. In addition, scaled items that had a factor loading less than .40 were omitted (Stevens, 1986).

Based on the factor analyses, questions in the learning needs section were extracted into four factors with a

minimum eigenvalue of 1.12 that led to a total of 62.7 percent of variance. All the factors have a minimum loading of more than .40, which were .44; .44; .58; .46, respectively. Question in the learning satisfactions section were extracted into four factors with a minimum eigenvalue of 1.22, which led to a total of 61.1 percent of variance. The minimum loadings were .45, .55, .42, .71, respectively.

Results and Findings

The majority of participants were male (68.9%). Most of the participants (73.5 %) were older than 30 years old, while only 4.8 percent of participants were younger than 20 years old. More than half of the participants (56.5 %) were married. More than half (50.7%) of the participants were working in manufactures, while fifteen (5.1%) of the participants were unemployed. The highest percentage (35.4%) of the participants were clerks, while seventy-nine respondents (26.9%) were line workers; forty-five respondents (15.3%) were supervisors; twenty-eight respondents (9.5%) were management; and thirteen respondents (4.4%) were business owners. Fifty-three participants (18.0%) had monthly income less than NT\$20,000, while only 18 participants (6.1%) had monthly income more than NT\$50,000. However, the largest monthly income group (43.9%) fell into NT\$30,000 to NT\$40,000.

In summary, by using modes as a guideline, a typical survey participant was described generally as follows: A 30 to 39 year-old married male, who worked as an administrative clerk in a manufacture environment with monthly income of NT\$30,000 to NT\$40,000.

According to the statistics test results, every item in this section has a mean score greater than 3, which indicated that all of these needs were somewhat important to most of the participants. In which, "increase competitive advantages", with a mean score of 4.06, seems to be the most importance need. There were four items (career development, chance of promotion, self-assurance, and fulfilling and enjoyable) having mean values larger than 4.

According to the test results, all items in this section had mean scores less than 4, which indicated that none of these factors really satisfied most of the participants. In which, "relationship between teachers and students", with a mean score of 3.84, seems to be most satisfied by the participants, while "tuition fee", with a mean score of 2.17, seems to be least satisfied. Items that were related to instructors, curriculum, and learning materials had higher satisfaction levels than environment-related items did.

Research Hypothesis 1:

H1: There is no relationship between demographic factors and the learning needs of the non-traditional students in college extension programs.

Gender difference caused significant difference to the variable Career Change. The t-value was 2.02 ($p=.04$). Female participants had stronger desire to change their careers. However, gender did not cause any difference among the other three variables. Participants who were not married tended to have higher desire to the need of Competency Enhancement. The t-value was 3.26 ($p=.04$). However, the results indicated an opposite direction for the variable Career Change. Married participants tended to have stronger desire for career change. Variables Competency Enhancement, Self-Accomplishment, and Career Change were different among different age groups. Their F-values were 5.27, 2.83, 4.24, respectively ($p<.05$). Variables of Income and Position were significantly different on the factor of Self-Accomplishment. Their F-values were 3.92 and 2.24, respectively ($p<.05$). The results indicated that participants with lower income and lower level of positions had stronger desire for competency enhancement.

The test results showed that there were relationships between demographics and learning needs, therefore, the null hypothesis was rejected.

Research Hypothesis 2:

H2: There is no relationship between demographic factors and the learning satisfactions of the non-traditional students in college extension programs.

Four independent variables in the category of Learning satisfactions were tested separately according to the characteristics of the selected demographic variables. Participants of different gender significantly differed in all aspects of learning satisfactions. Among the four variables, female participants tended to have higher satisfaction with a lowest t-value of 2.73 ($p<.01$). Marital status affected participants' attitudes toward instructional-related Factor with a t-value of 2.07 ($p<.05$). In which, participants who were not married were more satisfied.

Both variables of Age and Personal Income affected participants' attitudes toward instructional-related factor

The younger the participants are, the higher the satisfactions they have. The participants who make the highest income tended to have higher levels of satisfaction. Although the test results showed that the levels of learning satisfaction differ significantly among different income groups, there was no pattern found.

The test results indicated that learning satisfaction differed significantly among occupation groups. Participants who had no jobs had the higher level of satisfaction with a mean score of 3.55 toward instructional-related variables while the businessmen were the least satisfied group with a mean score of 2.84.

This study also revealed that most of the respondents were not really satisfied with curriculum-related variables, since there was not any group's mean score higher than 3.0 except manufacture workers. The test results showed that there were relationships between demographics and learning satisfaction, therefore, the null hypothesis was rejected.

Research Hypothesis 3:

H3: There is no relationship between learning needs and the learning satisfactions of non-traditional students in college extension programs.

Four variables in the learning needs section and four variables in the learning satisfactions were paired and performed paired-sample correlation analysis. Six paired-samples were significantly related (Table 1).

The variable Competency Enhancement was positively related to the variable Environment-related Factor. Participants who had stronger desire for improving their competence tended to have higher satisfaction toward environment-related factor.

The variable Job Advancement was negatively related to the variable Interpersonal-related Factor. Participants who had stronger desire for increasing their opportunity to promotion or getting higher pay tended to have lower satisfaction toward interpersonal-related factor.

The variable Self-Accomplishment was positively related to the variables Instructional-related Factor and Interpersonal-related Factor. Participants who had stronger desire for self-accomplishment and social needs tended to have higher satisfaction toward instructional-related and interpersonal-related factors.

The variable Career Change was negatively related to the variables Instructional-related and Curriculum-related Factors. Participants who had stronger desire for changing their careers tended to have lower satisfaction toward instructional-related and curriculum-related factors.

The results indicated that there were relationships between learning needs and learning satisfaction, therefore the null hypothesis was rejected.

Table 1. Paired Samples Correlation Results of Selected Paired-Variables

Variable Pair	n	Correlation	p
Competency enhancement vs. Environment-related factor	294	.18	.00
Job advancement vs. Interpersonal-related factor	294	-.16	.01
Self-accomplishment vs. Instructional-related factor	294	.24	.00
Self-accomplishment vs. Interpersonal-related factor	294	.35	.00
Careerchange vs. Instructional-related factor	294	-.24	.00
Career change vs. Curriculum-related factor	294	-.17	.00

Conclusions

Female adult learners were more satisfied with their learning than their counterparts. They also were concerned more about career change, which supported the previous study made by Malin in 1980 that female adult students are more satisfied with their learning compared to males. Younger adults (29 years old and younger) showed stronger tendency on pursuing competency enhancement while the older adult learners (30 years old and older) were more concerned

about career change. Age only showed differences toward learning satisfaction on instructional-related factors in that the satisfaction levels dropped as age increases. This finding seemed opposite to the literature that older adult learners are more satisfied with their learning. This might be attributed to Taiwanese culture and the educational practices in Taiwan that is still traditional. Therefore, a further study in depth on age is needed.

Married adult learners had higher tendency to change their career while unmarried adult learners were more concerned about competency enhancement. It can be assumed that married adults are more likely to have needs to make more money in order to support their families. Current jobs might not be sufficient to meet the requirements of increasing expenses on children's education and other needs. Lower income students had stronger tendency to improve their competency levels which is consistent with the assumption that lower income students are more likely to seek for job advancement and career opportunities. Higher income students in this present study showed higher satisfaction levels than lower income students.

Previous studies found that occupation is a factor that affects student's learning satisfactions (Ma, 1988; Yu, 1998). The finding of the present study is consistent with the literature. None of the groups were satisfied with the environment-related factors. This revealed an important issue that financial concerns are a big problem for adult students re-entering schools. The mean score on Item 16 in satisfaction section was only 2.17, which indicated that tuition fee was one of the reasons that respondents were not satisfied. Financial burden has always been a problem for adult students (Chu & Hinton, 2000).

Position was also a factor affecting student's satisfactions. This study found that the business owners were the most satisfied group toward instructional-related factor, curriculum-related factor, and interpersonal-related factor. There is a negative relationship between Job Advancement and Interpersonal-related Factor. The higher the desire for job advancement, the lower the satisfactions.

As described earlier, Younger groups tended to have strong desire for self-accomplishment. This study also found that students who were seeking self-accomplishment tended to have higher satisfaction levels toward instructional-related factor and interpersonal-related factor. Therefore, it could be concluded that participants who were younger and pursuing self-accomplishment were more satisfied with their learning. Students who cared about their careers were less satisfied with the instructional-related factor and curriculum-related factor. Those students were older with more experiences in life and work. Taiwanese educational practices, which tend to be more traditional than non-traditional, might not be able to meet their learning needs. This could be attributed to the fact, as discussed earlier, that older students were less satisfied with the educational practices in Taiwan. Therefore, one can conclude that the participants who were older and were seeking career changes had unfavorable attitudes toward factors related to instruction and curriculum.

How This Research Contributes to New Knowledge in HRD

1. Learning needs of Taiwanese adult students were significantly different among different groups in almost every aspect of demographic variables. Therefore, the philosophy of "one size fits all" toward adult extension education definitely does not work. Practitioners of adult education in Taiwan have to make their efforts in curriculum design and instructional methods to enhance adult learning.
2. Most of the older learners did not accept traditional teaching techniques. To improve the efficiency of teaching processes and to obtain better learning results, instructors have to learn the concept and applications of andragogy, and to improve their relationship with those adult learners. The Taiwan government should take it seriously and develop an implementation plan such as providing training, workshops, and seminars to instructors who are involved with teaching adult learners.
3. Most adult students considered financial issues. In order to provide opportunities for adult learners to re-enter school, the government might need to provide more help such as student loans for adult learners, and other means to help adult learners to return to schools. Business employers also should provide financial reimbursement for the workers who are seeking advance training and education.
4. Compared with other three factors, learning environment-related factor received lowest satisfaction. Institutes may need to alter their strategies for creating a more suitable learning environment for adult learners. Simplify registration processes, a special hotline for providing information and services for adult learners, A & Q section online service are suggestions to this area.
5. Age has been a factor to adult student's satisfactions on learning, and most of the studies on learning satisfaction indicated that the older the adult learners, the higher the satisfaction levels toward learning. However, this particular study did not show the same pattern. The researchers assumed that this might be attributed to cultural

differences and traditional educational practices in Taiwan. Therefore, further study is needed on cultural issues and educational practices in Taiwan.

References

- Cheng, Li-Jane (1983). *A relationship between class climate and learning behaviors of adult learners in supplementary high school programs*. Master's thesis. National Normal University, Taipei, Taiwan.
- Chu & Hinton. (2000). Factors affecting student completion in a distance learning mediated HRD baccalaureate program. *AHRD 2000 Conference Proceedings*, 2000.
- Creative Research System. (2001). Survey software that makes you look good. Internet document.
<http://www.surveysystem.com/>
- Dewey, J. (1933). *How we think*. Boston: Health..
- Gall, M., Borg, W., & Gall, J. (1996). *Educational research – An introduction* (6th ed.). New York: Longman.
- Houle, Cyril O. (1961). *The inquiry mind*. Madison: University of Wisconsin Press.
- Ministry of Education. (2000). Figures of schools and students. Ministry of Education, Taiwan.
- Fungaroli, Carole. (2000). *Traditional degrees for nontraditional students*, Farrar, Straus and Giroux.
- Knowles, M. (1970). *The modern practice of adult education: Andragogy vs. pedagogy*. New York: Association Press.
- Knowles, M. (1990). *The adult learner – A neglected species* (4th ed.). Gulf Publishing Company.
- Lee, D.W., & Luo, W.G. (1992). *Adult's learning needs and implementation in vocational education*. Master's thesis submitted to National Taiwan Normal University.
- Ma, F.T. (1988). *The relationship between teacher's behaviors and student's satisfaction in social education programs*. Thesis (M.Ed.)-National Taiwan Normal University.
- Malin, J.T. (1980). Factors affecting the performance and satisfaction of adult men and 4 women attending college. *Research in Higher Education*, 13 (2), 115-130.
- Norusis. (1990). *SPSS/PC+ statistics 4.0 for the IBM PC/XT/AT and PS/2*. Chicago: SPSS Inc.
- Pinkston, R. (1987). University support programs, academic achievement, and retention. (ERIC Document Reproduction Service No. ED 283 441)
- Stevens, J. (1986). *Applied multivariate statistics for the social sciences*. Hillsdale, N.J. : L. Erlbaum Associates.
- Tough, A. (1982). *Intentional change: A fresh approach to helping people change*. Chicago: Follett.
- Tzai, P.T. (1997). Adult career education: Point of view of developmental missions. *Adult education*, 40, 2-9.
- Urduan, T. C. (1997). Achievement goal theory: past results, future directions. In M. L. Maehr & P. R. Pintrich (Eds.), *Advances in motivation and achievement* (Vol. 10, pp. 99-141). Greenwich, CT: JAI Press Inc.
- Wiersma, W. (1991). *Research methods in education: An introduction* (5th ed.). Boston: Allyn and Bacon.
- Yu, P. (1998). *An investigation of student's satisfaction in 2-year college extension programs*. Master's thesis submitted to National Sun Yet-San University

BEST COPY AVAILABLE

Work/Family Variables Influencing the Work Satisfaction of Tennessee Extension Agents

April B. Martin
Michael Lane Morris
The University of Tennessee

This study explored the relationship between the work and family life of 539 County Extension Agents employed by The University of Tennessee Agricultural Extension Service. The purpose of the study was to examine how the Extension's Agent's family life affected their work satisfaction. The life and parental satisfaction scores of the Agents were the only predictors for work satisfaction. Work satisfaction was not predicted by marital satisfaction or the selected demographic variables including job title, gender, income, employment responsibility, years in present position, length of marital status, age, and education.

Keywords: Extension Agents, Work Satisfaction, Family-work Conflict

Human Resource Development (HRD) has been defined as "the integrated use of training and development, organization development, and career development to improve individual, group and organization effectiveness" (McLagan, 1989). One common area that all employees can relate to is the conflict between family and work or family-work conflict (FWC). In the last twenty years, research in work-family conflict (WFC) has moved beyond family and psychology fields and begun to be implemented in business, management, and human resources. Professionals who strive to improve HRD functions in an organization should develop a better understanding of work-family conflict (Madsen, 2001).

The Extension Service was established in 1914 with the passing of the Smith-Lever Act. It was designed as a partnership between the land-grant universities and the United States Department of Agriculture (USDA). The organization consists of agricultural and family and consumer science agents who work with in either an adult and/or youth audience at the county, district, state, and national levels. While there are countless studies focusing on the relationship between work and family life among other occupational groups, the number of published studies examining the relationship between work and family life of extension workers has been limited (Fetsch & Kennington, 1988; Igodan & NewComb, 1986; and St. Pierre 1984). Thus, this study explored the relationship between the work and family life of County Extension Agents employed by The University of Tennessee Agricultural Extension Service. The purpose of the study was to examine how marital, parental, and life satisfaction influence the work satisfaction of Extension Agents in Tennessee, and also, to make recommendations for how HRD professionals can assist this unique occupational group in maximizing their performance.

Theoretical Framework

Several theories have been offered as a basis for examining and better understanding the relationships existing between work and family. Because the dynamics within the relationship of work and family can be an important source of stress, it can lead to negative and detrimental consequences affecting both home and the workplace (Hammer, Allen & Grigsby, 1997). For this study, two theories (i.e., Family Systems Theory, Spillover Theory) will serve as guiding frameworks.

Family Systems Theory

A primary tenet of the Family Systems Theory suggests that when one member of the system is impacted, the entire system is affected, including all individuals and levels (e.g., micro-system, macro-system, exo-system) of that system (Broderick & Smith, 1979). In reviewing the issue of WFC, the family systems theory gives a set of general principles to assist researchers in making predictions that can be tested. The interactions of individuals within the family system with external contexts (i.e., work) is the primary principle being examined in this study (Boss, Doherty, LaRossa, Schumm, & Steinmetz, 1993).

Spillover Theory

Spillover theory seeks to explain the bi-directional influences between the dynamics of work and family life. This theory explains how positive and/or negative experiences in one domain (e.g., family) can exceed the boundaries of that domain and cross over into the experiences and interactions of another domain (e.g., workplace)

Copyright © 2002 April B. Martin and Michael Lane Morris

(Foley & Powell, 1997). For example, when positive feelings and experiences in the home are perceived, then those same attributes can be carried into the workplace. Similarly, when negative feelings and experiences are perceived at home, then dissatisfaction, distraction and/or preoccupation, strain, loss of energy and unhappiness are experienced in the workplace.

Review of the Literature

Parental Satisfaction as Influenced by Work and Family

Parental satisfaction is a parent's overall feelings about the quality of his/her relationship with their children (Umberson, 1989). A dominant theme in parenting research is that the demands of individuals who juggle multiple roles produce more stress, and consequently, this results in a decline of well-being (Barnett, 1994; Bedeian, Burke & Moffett, 1988; Kinnunen, Gerris, & Vermulst, 1996; MacEwen & Barling, 1994; Majewski, 1986; Morris & Blanton, 1994; Schulz, 1993).

Work Satisfaction as Influenced by Work and Family

Globally defined, work satisfaction or job satisfaction is a fulfillment of an individual's needs associated with their work. Initial research on job satisfaction was done to improve productivity. Later research was more humanistic in its approach by trying to improve employees' lives by improving their job satisfaction (Hopkins, 1983). According to Adams et al. (1996), much of the literature concerning the relationship between work and family has focused upon two variables. One area of focus has been on work-family conflict. This type of conflict can produce stress that induces psychological and physical problems. The relationship between work and family is bi-directional as work can interfere with family and family can interfere with work (Foley & Powell, 1997). The second area of focus has been on social support. Social support is usually emotional in nature such as listening, being empathetic, or helping to solve a problem. Researchers have asserted that when there is social support given by individuals at work and/or in the family, the workers' general health and well-being can be positively affected (e.g. Beehr & McGrath, 1992; Cohen & Wills, 1985).

Life Satisfaction as Influenced by Work and Family

Empirical research on life satisfaction as influenced by work and family is very limited. A review of the literature produced only five articles related to life satisfaction. Life Satisfaction is an individual's overall feelings of the quality of their day-to-day life related to his/her work, place of residence, way of life, activities done for enjoyment, and health (Spanier & Thompson, 1984). The relationships between work and family can have an important effect on life satisfaction of an individual (Adams et al., 1996). In a meta analysis study of all published studies that measured work-family conflict and job and life satisfaction, Kossek and Ozeki (1998) concluded that regardless of the type of measure used ("bidirectional, work-family conflict, work to family, or family to work") a negative relationship was consistently found for all types of measures; however, family to work conflict was slightly less strong. In addition, they found that the job-life satisfaction and work-family conflict was stronger for women than men.

Marital Satisfaction as Influenced by Work and Family

Marital satisfaction is the global subjective evaluation of one's feelings about his/her marriage (Sabatelli, 1988). Orbuch, House, Mero, and Webster (1996) found that marital satisfaction tends to be at its highest levels in the early years of marriage and then declines until mid-life at which point it steadily rises as age and length of marriage increases. They also found that reduced work and parental responsibilities in later life are related to the increase in marital satisfaction. The literature has often reported that the predictors of marital satisfaction are different for women than men (Bochner, Krueger, & Chmielewski, 1982; Crago & Tharp, 1968; Kotler & Hammond, 1981; and Terry & Scott, 1987).

Work, Life, Parental and Marital Satisfaction of Extension Agents as Influenced by Work and Family Life

While there are countless studies on the relationship between work and family life among other occupational groups, the number of published studies examining the relationship between work and family life of extension workers has been limited (Fetsch & Kennington, 1988; Igodan & NewComb, 1986; and St. Pierre 1984).

Researchers have found differences for agents according to their area of employment responsibility or job title more than any other variable (Boltes, 1995; Bowen and Keyser, 1994; Fetsch & Kennington, 1997; Igodan and NewComb, 1986; Kelsner, 1989; Riggs & Beus, 1993; St. Pierre, 1984;).

The purpose of the study was to examine how family life affects the work satisfaction of Extension agents. Specifically, the focus was on how parental, marital, and life satisfactions influence the work satisfaction of Extension Agents in Tennessee. In this study, four null hypotheses will be tested: (1) There is no difference in the reported work satisfaction, parental satisfaction, life satisfaction, and marital satisfaction of male and female agents; (2) There is no difference in agents' work satisfaction, parental satisfaction, life satisfaction, and marital satisfaction scores by employment responsibility; (3) The agents' work satisfaction, as measured by the Work Satisfaction Scale (WSS), is not predicted by life, marital, and parental satisfaction; (4) The agents' work satisfaction, as measured by the WSS, is not predicted by the demographic variables including age, length of marriage, income, educational level, job title, length of service, area of employment responsibility, have children, or number of children.

Methods

The total number of Extension Agents participating in this study was 298. This provided a response rate of 55%. By area of employment responsibility this number represented 90 (30.4%) agents in Adult Agriculture, 34 (11.5%) in Adult Family and Consumer Sciences, 68 (23%) in 4H Youth only, 36 (12.1%) in Adult Agriculture and 4H Youth combined, 33 (11.1%) in Adult and 4H Youth Family and Consumer Sciences combined, 6 (2%) in Expanded Food-Nutrition Education Program (EFNEP), and 29 (9.8%) in other. The agents worked a mean of 49 hours per week, had been in their present position for a mean of 9.53 years, and had been employed with the Tennessee Extension Service for 15 years. The mean age of the respondents was 43 years. Gender within the sample included 168 (56%) male and 130 (44%) females. The racial composition was 277 (93%) White Americans, 17 (6%) African Americans, 1 (.3%) Latin Americans, and 1 (.3%) other.

Instrumentation

The four instruments used as part of the present study were the Work Satisfaction Scale (WSS), Kansas Marital Satisfaction Scale (KMSS), Parent-Child Relational Quality Scale (PCR-Quality), and the Life Satisfaction Scale (LSS). In addition to these instruments, a personal history instrument was used to collect sociodemographic information.

The Work Satisfaction Scale (WSS) (Blanding, 1993) was used to measure the degree of job satisfaction, happiness in the job environment and satisfaction with the supervisor. The WSS is a three item, 4-point Likert-type scale that utilizes a response format ranging from "1 = Not Satisfied At All" to "4 = Very Satisfied. The reliability alpha coefficient for the WSS in this study was .70.

The Kansas Marital Satisfaction Scale (KMSS) (Schumm et al. 1986) was used to measure perceived marital satisfaction. The KMSS is a three-item, seven-point Likert-type questionnaire used to assess satisfaction with 1) marriage as an institution, 2) the marital relationship, and 3) the character of one's spouse. The KMSS utilizes a response format ranging from "1 = Extremely Dissatisfied" to "7 = Extremely Satisfied" with higher summed scores representing higher levels of satisfaction. Cronbach's alpha for the KMSS in this study was .97.

The Parent-Child Relational Quality Scale (PCR-Quality) (Umberson, 1989) measured the positive content of parent-child relationships. The PCR-Quality Scale is a 4-point, three item Likert-type scale. Responses may range from "1 = Very satisfying, Very happy, or Very well" to "4 = Not satisfying at all, Not Happy at all, or Not at all well". Scores on the scale were recoded to yield higher scores on the PCR-Quality indicating more positive parent-child relationships. For this study, the PCR-Quality Scale reported an alpha of .79.

The Life Satisfaction Scale (LSS) (Spanier & Thompson, 1984) contains five Likert-type items and utilizes a 3-point response format. One sample item is "How satisfying is the work you do?" Responses range from "1 = Not satisfied" to "3 = Extremely satisfied". For this study, the alpha reported by the Life Satisfaction scale was .70.

Results

Results from hypotheses one through four are presented below.

Hypothesis 1

The first null hypothesis stated that the mean for work satisfaction, parental satisfaction, life satisfaction, and marital satisfaction of males would be no different to that of females. The scores for marital satisfaction were highly skewed to the left. Because of the distribution problems, this hypothesis was tested using the Mann-Whitney test. The Mann-Whitney U test is a non-parametric test equivalent to the t test.

For work satisfaction, the Mann-Whitney test gave a test statistic score of 10051.5 ($p \leq .116$); marital satisfaction, a score of 5506.5 ($P \leq .340$); life satisfaction, a score of 10213.5 ($p \leq .252$); and parental satisfaction, a score of 3863 ($p \leq .373$). Mean marital, parental, work and life satisfaction scores did not differ between males and females. Thus, the first null hypothesis could not be rejected.

Hypothesis 2

The second null hypothesis stated that the subjects' work satisfaction, parental satisfaction, life satisfaction, and marital satisfaction scores would show no differences when comparing the agent groups by employment responsibility. As in the previous hypothesis, a non parametric test was used because of the distribution problem with marriage satisfaction. The Kruskal-Wallis H test (a non-parametric equivalent to the one-way ANOVA) was used to determine whether several independent samples are from the same population. There were no differences in work satisfaction ($p = .162$), parental satisfaction ($p = .962$), life satisfaction ($p = .069$), or marital satisfaction ($p = .150$) when comparing the agent groups by employment responsibility. Since the significance value for the tests on each of the satisfaction scores was $> .05$, the null hypothesis could not be rejected.

Hypothesis 3

The third null hypothesis states that the subjects' work satisfaction as measured by the WSS cannot be predicted by life, marital, and parental satisfaction. Correlation and stepwise regression analyses were used to test this hypothesis. The correlations between work, marital, life, and parental satisfaction and age, length of marital status, hours worked per week, years in present position, years of employment, parents (have children) and number of children. Correlation analyses showed a moderately positive linear relationship between work satisfaction and marital satisfaction (.221, $p < .001$), life satisfaction (.399, $p < .000$), and parental satisfaction (.290, $p < .000$).

A forward stepwise regression analysis was first used to predict work satisfaction using marital, life, and parental satisfaction scores. Only life and parental satisfaction were retained. The model F-test was 15.05 a p-value of $< .001$. Consequently, the hypothesis of no regression effect can be rejected. Individual t-tests on regression coefficients (Betas) in this model indicated that both life satisfaction and parental satisfaction were significant predictors of work satisfaction (see Table 1).

Table 1. ANOVA table from a linear regression predicting work satisfaction from marital, life, and parental satisfaction scores.

Model Summary					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	
1	.363 ^a	.132	.126	1.58183	
2	.413 ^b	.171	.160	1.55099	

a. Predictors: (Constant), NEWLSAT

b. Predictors: (Constant), NEWLSAT, PARSAT

ANOVA ^c						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	55.815	1	55.815	22.306	.000 ^a
	Residual	367.823	147	2.502		
	Total	423.638	148			
2	Regression	72.424	2	36.212	15.053	.000 ^b
	Residual	351.214	146	2.406		
	Total	423.638	148			

a. Predictors: (Constant), NEWLSAT

b. Predictors: (Constant), NEWLSAT, PARSAT

c. Dependent Variable: JOBSAT

*** $\leq .001$; ** $\leq .01$; * $\leq .05$

Hypothesis 4

The fourth null hypothesis was that the subjects' work satisfaction as measured by the Work Satisfaction Scale cannot be predicted by the demographic variables including age, length of marriage, income, educational level, job title, length of service, area of employment responsibility, have children, or number of children. For the overall regression model, the ANOVA F-test was 1.36 with a significance of .142. Since the p value was $> .05$ this

hypothesis could not be rejected and it can be concluded that, in this sample, none of these variables are good predictors of work satisfaction

Discussion

In conclusion, data analysis procedures in this study indicated that Tennessee Extension Agents' work satisfaction could be significantly predicted by a reduced model for life satisfaction and parental satisfaction. In terms of sociodemographic variables, it can be concluded from this study that number of children, job title, gender, income, employment responsibility, years in present position, length of marital status, age, and education were not significant predictors of work satisfaction. Specific conclusions for HRD professionals and researchers are identified and discussed below.

The subjects' marital satisfaction, parental satisfaction, life satisfaction, and work satisfaction showed no gender differences. This is partially consistent with past research in other occupational fields. There has been some gender differences found for marital satisfaction in previous studies unrelated to the Extension field (Barry, 1970; Blood & Wolfe, 1960; Bochner et al., 1982; Brinley, 1975; Crago & Tharp, 1968; Kotler & Hammond, 1981; Lee, 1977; Tharp, 1963; and Terry & Scott, 1987). There have also been some gender differences for work or job satisfaction (Bowen, 1994). According to this study, all of the agents are equally satisfied with all satisfaction levels regardless of gender. This could be perceived as a positive finding by some as the findings might suggest that the majority of the employees are equally satisfied in regard to the satisfaction areas analyzed regardless of gender. Other researchers (Kinnunen & Mauno, 1998) have found similar results when examining gender. Future researchers exploring gender differences might consider using multi-method data collection procedures.

It was surprising to find that there were no differences in work satisfaction, parental satisfaction, life satisfaction, or work satisfaction when comparing agents by their area of employment role responsibility. In previous studies, the majority of research has found significant differences for agents according to their area of employment responsibility (Boltes, 1995; Bowen 1994; Fetsch & Kennington, 1997; Igodan and NewComb, 1986; Kelsner, 1989; Riggs & Beus, 1993; St. Pierre, 1984). Again, future researchers using multiple methodologies (i.e., mixture of qualitative and quantitative methods) for data collection might capture subtle nuances not always found with single methods. For example, an area of investigation that might be productive would be to qualitatively examine a complex network of work/family interactions that include how an individual with a larger number of salient roles perceives those roles in relation to their expectations and values in other salient roles (Edwards & Rothbard, 2000). Aaron-Corbin (1999) found that the more roles a person acquires and is expected to effectively perform, the more complex and difficult it becomes to fulfill with high satisfaction the responsibilities of other roles.

Life satisfaction and parental satisfaction were found to be significant predictors of work satisfaction. Extension Agents with higher life satisfaction and parental satisfaction scores tended to have higher work satisfaction scores. Findings from this study seem to support other scholarship efforts which has suggested that individuals who more optimistically perceive several of their salient life roles (e.g., spouse, parent, employee) tend to view other roles more optimistically (Aryee & Luk, 1996).

Surprisingly with past research, none of the demographic variables were found to be significantly related to work satisfaction. In previous research, antecedents like age of child, childcare arrangements, education level, gender, number of children, personality type, and length of service have been determinants of work/family stress and conflict (e.g., Aaron-Corbin, 1999; Aryee & Luk, 1996; Carlson, 1999; Eagle, Miles, & Icenogle, 1997).

Implications and Limitations for Research and Practice

Implications for research can be developed from the limitations of this study. Distribution problems were encountered with the global measures of marital, parental, and life satisfaction. However, in previous studies, this instrument, like many other global assessments of satisfaction, has been noted for its inability to produce greater score distributions among non-clinical populations (Fincham & Bradbury, 1987). In addition, this sample was from primarily rural areas type. In future studies, it is recommended that Extension Agents be studied on a broader scale with a national sample. This study would have been enhanced if the spouses had participated. Future human resource development researchers should consider recruiting the spouses of Extension Agents to be involved in their studies. Family Systems Theory suggests that spouses and children might be a rich source of responses as they are also impacted by the resultant stress and conflict stemming from work. Methods that might possibly be used to carry this out include questionnaires mailed to the Extension Agents' homes or telephone interviews. Regardless, these non-work-related satellite members (i.e., spouse, children) should be included by human resource personnel as targets for support, encouragement, and quality of life improvement as they are often a critical variable influencing the overall satisfaction of an employee.

In the past, Corporate America tended to focus on productivity while ignoring the employee and their families. Companies who have operated from this paradigm report issues like decreased individual performance, higher work dissatisfaction, higher rates of tardiness, absenteeism and turnover, higher emotional exhaustion, increased rates of chemical use/abuse, and higher rates of employee reported health problems (e.g., Abbott, DeCieri, & Iverson, 1998; Boles & Babin, 1996; Boles, Johnston, & Hair, 1997; Cohen, 1995; Frone Russell, & Cooper, 1993; Frone Russell, & Cooper, 1997; Kossek & Ozeki, 1998).

More recently however, many companies, through the efforts of human resource development professionals, are beginning to realize that one of the keys to productivity leading to increased profit margins are to provide work environments and education programs that foster the employees' happiness and satisfaction in other salient roles (e.g., parenting workshops, relationship wellness programs) and dimensions of their life. Cohen (1995) and Kirchmeyer (1995) have found in their studies that the way employees perceive their performance in nonworking domains greatly impacts their work attitudes.

Companies and organizations that have embraced more supportive and work/family friendly environments have observed lower levels of depression, somatic complaints, reduced levels of blood cholesterol, reduced economic costs for health insurance claims, lost work days, and productivity (Thomas & Ganster, 1995; Yang, 1998). HRD professionals could be extremely helpful to organizations like Extension Services by helping their administrators recognize the relevant work/family stressors experienced by their employees (i.e., agents) as contributing sources of their work/family conflict. HRD professionals could also assist in the development, design, and implementation of work/family initiatives and programs that would promote satisfaction, encouragement, commitment to their demanding jobs.

The Extension Service has made some strides in this philosophy, but there is still room for improvement. There are many good benefits for an Extension Agent in Tennessee. For example, as a University of Tennessee employee, Agents receive 24 paid days of annual leave and 12 days for holidays. Programs are available such as medical flexible benefits, a sick leave bank, and employer retirement contributions. In most counties, Agents are allowed flexibility in their work schedule which helps to alleviate some of the stress that employees encounter in this job. However, there is no compensation for the many hours of overtime, little recognition or awards for achievement, few opportunities for advancement, and a low salary pay scale.

As an occupation group, Extension Service Agents are clearly identified as helping professionals who work long hours in assisting others meet their life demands and expectations. Similar to occupations with a "calling" (e.g., clergy), many agents exceed normal employment expectations in rendering service and support to their respective communities. Such demands place them at risk for exhaustion, burnout, and higher attrition rates.

In response, several Extension Service organizations in other states have addressed the problem of balancing work and family with their employees and have begun incorporating some of the following:

- Modified organizational policies/practices that added to high stress levels.
- Created programs that increase Agent's coping skills and productivity.
- Funded well-designed program evaluation studies to determine which balancing work and family programs work best with whom.
- Included time and stress management strategies into one's daily life (Fetsch & Kennington, 1997).

What are the advantages to businesses and organizations for implementing WFC initiatives? Research has demonstrated that employees will be more productive and effective if WFC/FWC is managed properly (Madsen, 2001). According to Bond, Galinsky, and Swanberg, (1997) and Thompson, Beauvias, and Lyness (1999), workers who enjoy supportive workplaces and organizational cultures (i.e., flexibility in work arrangements, supervisor support, supportive workplace culture, positive coworkers relations) are more productive, more loyal, have higher levels of job satisfaction, commitment to their employers, and retention. It is hoped and believed that HRD professionals could be instrumental in assisting occupational groups like Extension Services go further in maximizing the human and intellectual capital of its employees.

References

- Aaron-Corbin, C. (1999, October). *The multiple-role balancing act. Management Review*, 62-63.
- Abbott, J., DeCieri, H., & Iverson, R. D. (1998). Costing turnover: Implications of work/family conflict at management level [Abstract]. *Asia Pacific Journal of Human Resources*, 36(1), 25-44.
- Adams, G. A., King, L. A., & King, D. W. (1996). Relationships of job and family involvement, family social support, and work-family conflict with job and life satisfaction. *Journal of Applied Psychology*, 81, 411 - 420.
- Aryee, S., & Luk, V. (1996). Work and nonwork influences on career satisfaction of dual-earner couples. *Journal of Vocational Behavior*, 49, 38-52.
- Barnett, R. C. (1994). Home-to-work spillover revisited: a study of full-time employed women in dual-earner

- couples. *Journal of Marriage and the Family*, 56, 647 - 656.
- Barry, W. A. (1970). Marriage research & conflict: Integrative review. *Psychological Bulletin*, 73, 41 - 54.
- Beehr, T. A., & McGrath, J.E. (1992). Social support, occupational stress and anxiety. *Anxiety, Stress, and Coping*, 5, 7-19.
- Bochner, A. P., Krueger, D. L. & Chmielewski, T.L. (1982). Interpersonal perceptions and marital adjustment. *Journal of Communication*, 32, 136 - 147.
- Boles, J. S., & Babin, B. J. (1996). On the front lines: Stress, conflict, and the consumer service provider. *Journal of Business Research*, 37(1), 41-50.
- Boles, J. S., Johnston, M. W., & Hair, Jr., S. F. (1997). Role stress, work-family conflict and emotional exhaustion: Inter-relationships and effects on some work-related consequences. *Journal of Personal Selling & Sales Management*, 17(1), 17-28.
- Boltes, B., Lippke, L., & Gregory E. (1995). Employee satisfaction in extension: a Texas study. *Journal of Extension*, 33, 1-3.
- Bond, J. T., Galinsky, E., & Swanberg, J. E. (1997). *Synthesis of Findings: The 1997 national study of the changing workforce*. New York: Families and Work Institute.
- Boss, P., Dhoerty, L., Schumm, W. R., & Steinmetz, S. R. (1993). *Sourcebook of family theories and methods*. New York, NY: Plenum Press.
- Bowen, C, Radhakrishna, R., & Keyser, R. (1994). Job satisfaction and commitment of 4-H agents. *Journal of Extension*, 32, 1-3.
- Broderick, C., & Smith, J. (1979). The general systems approach to the family. In W. R. Burr, R. Hill, F. I. Nye, & I. Reiss (Eds.) *Contemporary theories about the family*, (vol. 2, pp.112-129). New York: Macmillan Press.
- Carlson, D. S. (1999). Personality and role variables as predictors of three forms of work-family conflict. *Journal of Vocational Behavior*, 55, 236-253.
- Church L. J. & Pals, D. A. (1982, Sept/Oct). Before you resign.... *Journal of Extension*, 43-49.
- Cohen, A. (1995). An examination of the relationships between work commitment and non-work domains. *Human Relations*, 48(3), 239-263.
- Cohen, J., & Willis, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin*, 98, 310-357.
- Crago, M., & Tharp, R. G. (1986). Psychopathology and marital role disturbance: A test of the Tharp-Otis descriptive hypothesis. *Journal of Consulting and Clinical Psychology*, 82, 338 - 341.
- Eagle, B. W., Miles, E. W., & Icenogle, M. L. (1997). Interrole conflicts and permeability of work and family domains: Are there gender differences? *Journal of Vocational Behavior*, 50, 168-184.
- Edwards, J. R., & Rothbard, N. P. (2000). Mechanisms linking work and family: Clarifying the relationship between work and family constructs. *Academy of Management Review*, 25(1), 178-199.
- Fetsch, R. J., Flashman, R., & Jeffers, D. (1984, May/June). Easing the pressure on county agents. *Journal of Extension*, 23-27.
- Fetsch, R. J. & Kennington, M. S. (1997). Balancing work and family in cooperative extension: history, effective programs, and future directions. *Journal of Extension*, 35:1, 1 - 7.
- Fincham, F., & Bradbury, T. (1987). The assessment of marital quality: Toward a methodological and conceptual refinement. *Journal of Marriage and the Family*, 49, 31-49.
- Foley, S., & Powell, G. N. (1997). Reconceptualizing work-family conflict for business/marriage partners: A theoretical model. *Journal of Small Business Management*, 35(4), 36-47.
- Frone, M. R., Russell, M., & Cooper, M. L. (1993). Relationship of work-family conflict, gender, and alcohol expectancies to alcohol use/abuse. *Journal of Organizational Behavior*, 14, 545-558.
- Frone, M. R., Russell, M., & Cooper, M. L. (1997). Relation of work-family conflict to health outcomes: A four-year study of employed parents. *Journal of Occupational & Organizational Psychology*, 70, 325-335.
- Hammer, L. B., Allen, E., & Grigsby, T. D., (1997). Work-family conflict in dual-earner couples: within individual and crossover effects of work and family. *Journal of Vocational Behavior*, 50, 185-203.
- Hopkins, A. H. (1983). *Work and Job Satisfaction in the Public Sector*, Totowa, NJ: Rowan & Allanheld.
- Igodan, O. C. & NewComb, L. H. (1986). Are you experiencing burnout? Symptoms and coping strategies for extension professionals. *Journal of Extension*, 24, 4 - 7.
- Kelser, K. (1989). Job satisfaction and perceived in-service needs of Iowa cooperative extension personnel. Dissertation. Iowa State University.
- Kinnumen, U., Gerris, J. & Vermulst, A. (1996). Work experiences and family functioning among employed fathers with children of school age. *Family Relations*, 45, 449-455.
- Kinnumen, U., & Mauno, S. (1998). Antecedents and outcomes of work-family conflict among employed women and men in Finland. *Human Relations*, 51, 157-177.

- Kirchmeyer, C. (1995). Managing the work-nonwork boundary: An assessment of organizational responses. *Human Relations, 48*(5), 515-535.
- Kossek, E. E. & Ozeki, C. (1998). Work-family conflict, policies, and the job-life satisfaction relationship: A review and directions for organizational behavior human resources research. *Journal of Applied Psychology, 83*(2), 139 - 149.
- Kotler, T., & Hammond, S. B. (1981). Marital quality and disturbed child behavior. *British Journal of Clinical Psychology, 20*, 187 - 198.
- Lobel, S. A. (1992). A value-laden approach to integrating work and family life. *Human Resource Management, 31*(3), 249 - 265.
- MacEwen, K. E. & Barling, J. (1994). Daily consequences of work interference with family and family interference with work. *Work & Stress, 8*(3), 244 - 254.
- Madsen, S. R. (2001). Work and Family Conflict: A Review of the Theory and Literature. *Annual proceedings of the Academy of Human Resource Development*, Tulsa, Oklahoma, March.
- Majewski, J. L. (1986). Conflicts, satisfactions, and attitudes during transition to the maternal role. *Nursing Research, 35*(1), 10 - 14.
- Manton, L. N & van Es, J. C. (1985, fall). Why do extension agents resign? *Journal of Extension, 27*-30.
- Maxa, E. (1997). Joint Council of Extension Professionals: Transition to the future, *Journal of Extension, 35*, 1-3.
- McLagan, P. A. (1989). *Models for HRD practice*. Alexandria, VA: American Society for Training and Development.
- Morris, M. L. & Blanton, P. W. (1994). The influence of work-related stressors on clergy husbands and their wives. *Family Relations, 43*, 189 - 195.
- O'Neil, R. & Greenberger, E. (1994). Patterns of commitment to work and parenting: implications for role strain. *Journal of Marriage and the Family, 56*, 101-118.
- Riggs, K., Beus, K. (1993). Job satisfaction in extension. *Journal of Extension, Summer, 15*-17.
- Sabatelli, R. M. (1984). The marital comparison level index: A measure for assessing outcomes relative to expectations. *Journal of Marriage and Family, 46*, 651 - 662.
- Schumm, W. R, Paff-Bergen, L. A., Hatch, R.C., Obiorah, F.C., Copeland, J.M., Meens, L.D., & Bugaighis, M.A. (1986). Concurrent and discriminant validity of the kansas marital satisfaction scale. *Journal of Marriage and Family, 48*, 381 - 387.
- Spanier, G. B. (1976). Measuring dyadic adjustment: new scales for assessing the quality of marriage and similar dyads. *Journal of Marriage and Family, 38*, 15 - 28.
- St. Pierre, T. L. (1984). *The relationship between work and family life of county extension agents in Pennsylvania. A thesis*, Pennsylvania State University.
- Staines, G. L. & Pleck, J.H. (1983). *The impact of workschedules on the family*. The Institute for Social Research. The University of Michigan: Ann Arbor, 1 - 159.
- Terry, D. J. & Scott, W. A. (1987). Gender differences in correlates of marital satisfaction. *Australian Journal of Psychology, 39*(2), 207 - 221.
- Tharp, R. G. (1963). Dimensions of marital roles. *Marriage and Family Living, 25*, 389 - 404.
- Thomas, L. T., & Ganster, D.C. (1995). Impact of family-supportive work variables on work-family conflict and strain: A control perspective. *Journal of Applied Psychology, 81*, 400-410.
- Thompson, C. A., Beauvais, L. L., & Lyness, K. S. (1999). When work-family benefits are not enough: The influence of work-family culture on benefit utilization, organizational attachments, and work-family conflict. *Journal of Vocational Behavior, 54*, 392-415.
- Umberson, D. (1989). Relationships with children: Explaining parents' psychological well-being. *Journal of Marriage and the Family, 51*, 999 - 1012.
- Yang, N. (1998). An international perspective on socioeconomic changes and their effects on life stress and career success of working women. *SAM Advanced Management Journal, 63*(3), 15-21.



REPRODUCTION RELEASE
(Specific Document)

I. DOCUMENT IDENTIFICATION:

Title: 2002 AHRD Conference Proceedings	
Author(s): Toby Marshall Egan & Susan A. Lynham	
Corporate Source: Academy of Human Resource Development	Publication Date: February 2002

II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, *Resources in Education (RIE)*, are usually made available to users in microfiche, reproduced paper copy, and electronic media, and sold through the ERIC Document Reproduction Service (EDRS). Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce and disseminate the identified document, please CHECK ONE of the following three options and sign at the bottom of the page.

The sample sticker shown below will be affixed to all Level 1 documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

Sample

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

1

Level 1



Check here for Level 1 release, permitting reproduction and dissemination in microfiche or other ERIC archive media (e.g., electronic) and paper copy.

The sample sticker shown below will be affixed to all Level 2A documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE, AND IN ELECTRONIC MEDIA FOR ERIC COLLECTION SUBSCRIBERS ONLY, HAS BEEN GRANTED BY

Sample

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

2A

Level 2A



Check here for Level 2A release, permitting reproduction and dissemination in microfiche and in electronic media for ERIC archival collection subscribers only

The sample sticker shown below will be affixed to all Level 2B documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY

Sample

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

2B

Level 2B



Check here for Level 2B release, permitting reproduction and dissemination in microfiche only

Documents will be processed as indicated provided reproduction quality permits.
If permission to reproduce is granted, but no box is checked, documents will be processed at Level 1.

I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche or electronic media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries.

Signature: <i>Kathryn J. Hoff</i>	Printed Name/Position/Title:	
Organizational Address: Academy of Human Resource Development College of Technology Bowling Green State University Bowling Green, OH 43403-0301	Telephone: 419.372.9155	FAX: 419.372.8385
	E-mail Address: office@ahrd.org	Date: 2-28-03

Sign here, → please

org

(over)

III. DOCUMENT AVAILABILITY INFORMATION (FROM NON-ERIC SOURCE):

If permission to reproduce is not granted to ERIC, or, if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents that cannot be made available through EDRS.)

Publisher/Distributor:
Address:
Price:

IV. REFERRAL OF ERIC TO COPYRIGHT/REPRODUCTION RIGHTS HOLDER:

If the right to grant this reproduction release is held by someone other than the addressee, please provide the appropriate name and address:

Name:
Address:

V. WHERE TO SEND THIS FORM:

Send this form to the following ERIC Clearinghouse: Acquisitions Coordinator ERIC Clearinghouse on Adult, Career, and Vocational Education Center on Education and Training for Employment 1900 Kenny Road Columbus, OH 43210-1090
--

However, if solicited by the ERIC Facility, or if making an unsolicited contribution to ERIC, return this form (and the document being contributed) to: