

## COMPETENCY ASSESSMENT AND HUMAN RESOURCE MANAGEMENT PERFORMANCE OF COUNTY EXTENSION CHAIRS IN OHIO

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### Abstract

*The purpose of this descriptive and correlational study was to examine perceptions of Ohio State University Extension county chairs regarding their human resource management competencies and performance of human resource management activities. The study also sought to describe the relationship between human resource management competencies and performance of human resource management activities of county chairs. County chairs were selected for study because they represent the first line of management most clientele and employees face. They also represent a group of extension managers least likely to have formal education or specialized training in human resource management. The highest human resource management competencies perceived by county chairs were written comprehension, oral comprehension, written expression, information gathering, inductive reasoning, and problem sensitivity. The human resource management activities for which county chairs indicated the highest means were: developing and maintaining positive work environment, administering wages and benefits, ensuring safety and health at worksites, and selecting and hiring employees. The correlation between summated competency and activity scores were significant with a very strong relationship between the variables.*

### Introduction

Skilled people are needed to coordinate the human, capital, and material resources required to accomplish the Cooperative Extension System's goals. These people, at varying levels of authority and responsibility, are accountable for the management of Extension. Management is inevitable, and the job of management cannot be evaded (Drucker, 1977). In performing their managerial duties, county chairs are responsible for planning, organizing, staffing or human resource management, leading, and controlling. To effectively and efficiently carry out managerial duties, county chairs need to possess relevant managerial behavior dimensions (Buford, Bedeian, & Lindner, 1995). There are several models that describe county chair managerial behavior dimensions. Managerial behavior dimensions for county chairs include oral communication, planning/organizing, leadership, decision making/judgment, initiative, objectivity, development of coworkers, perception, sensitivity,

management control, collaborativeness, written communication, behavioral flexibility, organizational sensitivity, and assertiveness (Haynes, 1996). Essential managerial behavior dimensions for county chairs include communication, public relations, leadership, planning, image building, budget accountability, decision making, evaluation, staff support, and motivation (Whiteside & Bachtel, 1987). Both of these models, as well as others, include similar managerial behavior dimensions for county chairs. In reviewing these lists it is apparent that many of the managerial behavior dimensions focus on human resource management activities carried out by county chairs.

The evolving roles of extension managers have closely mirrored that of its business contemporaries (Patterson, 1997). Because there is not a unified body of knowledge related to management in extension the literature review relies heavily.

Perhaps the most significant divergence between extension and business is that extension almost exclusively recruits its managers from within, while businesses rely

on both internal and formally educated and professionally trained external recruits. Other things being held equal, management is management, regardless of whether you are administering a six employee county extension office or a boutique shop (Higgins, 1994). That is, the work of managers is virtually the same, it is the context in which management occurs that varies.

The divergence between extension and business, with respect to managerial recruitment and selection practices, results in extension managers having less managerial competencies than their business contemporaries. To some, this suggests that extension should hire formally educated and professionally trained managers from outside the organization to manage its affairs (Campbell, 1999). To others this is a clarion call that suggests that extension must improve its efforts to identify and develop the best internal candidates for management positions (Stone, 1997; Broshar & Jost, 1995).

It has been shown that extension is in the business of identifying and training its employees for managerial positions (Haynes, 1996; Smith & Clark, 1987). The lack of formal education and training does perpetuate the problems associated with making poor managerial decisions. Most decisions made by county chairs through use of trial and error and common sense, however, have little impact on productivity or success (Lindner, 1999; Griffiths, 1959). In other words, any decision would be adequate. There are areas of management where a county chair's decision would have greater impact on productivity and success, thus, warranting added attention. The human resource management function of county chairs is one of these areas.

The problems, with respect to human resource management competence, are not confined to extension professionals. A study by Yeung, Woolcock, and Sullivan (1996) found that less than 35% of trained human resource professionals possessed the necessary competencies (knowledge, skills, and abilities) to perform their jobs as described. A study of more than 3,000 managers found that while formal education was associated with competence to perform

managerial tasks, the academic major itself was not particularly important (Duncan, 1978). In extension, the county chair with an undergraduate or graduate degree in management will be the exception rather than the rule.

The competency gap, therefore, between formally educated and professionally trained human resource management professionals and home grown county chairs may not be that great. Given the low level of competencies obtained through external recruitment, many businesses and organizations, including extension, are identifying and training internal candidates for managerial positions. The basic tenet that is being followed is as follows: Successful employees are successful because they acquired competencies in one or more occupational fields and excelled at applying those competencies, therefore, there is no reason to believe such an employee could not obtain and apply necessary human resource management competencies.

Because competencies establish the requirements needed to perform a job, competency models can be used: as an employee recruitment and selection tool; as an employee assessment tool; as a tool to develop employee training and orientation curriculum; as a coaching counseling, and mentoring tool; and as a career development and succession planning tool (McLagan, 1996). For competency models to be useful, competencies must be correlated to job activities (Parry, 1998). If, as Haynes (1996) and Smith and Clark (1987) suggest, competencies are to be used as selection, training, and development criteria for county extension administrators, such criteria must be validated as reliable predictors of job performance (Buford & Lindner, 2002).

### **Purpose**

The purpose of this study was to examine human resource management competencies and activities of Ohio State University Extension county chairs in staffing and human resource management. The specific objectives of the study were:

1. To describe Ohio State University Extension county chairs' perceptions of their human resource management competencies.
2. To describe Ohio State University Extension county chairs' perceptions of their ability to perform human resource management activities.
3. To examine relationships between the Ohio State University Extension county chairs' perceptions regarding human resource management competencies and their ability to perform human resource management activities.

### Methods

The research design used for this study was descriptive and correlational in nature. The target population for this study was all Ohio State University Extension county chairs. The population consisted of 96 Ohio State University Extension county chairs. A census of the Ohio State University Extension county chairs was conducted.

The questionnaire was divided into three parts. Knowledge, skill, and ability competencies were based on the US Department of Labor's Occupational Information Network (O\*Net; Mumford, Peterson, & Childs, 1997). O\*Net is a database of worker attributes and job characteristics that provides a national benchmark and common language for all users of occupational information. The first part was designed to measure the participants' perceived competency on 19 behavioral dimensions used to assess human resource management competencies. The participants were asked to indicate their current level of competence in each dimension using a five-point Likert-type scale. The points on the scale are: 1=Very Low; 2=Low; 3=Average; 4=High; and 5=Very High. The second part was designed to measure the participants' perceived ability to perform 14 human resource management activities. Human resource management activities were based on a review of the literature (Buford, Bedeian, & Lindner, 1995). The participants were asked to indicate their

ability to perform each activity using a five-point Likert-type scale. The points on the scale are: 1=Low; 2=Marginal; 3=Good; 4=Excellent; and 5=Outstanding.

Because the researchers were interested in participants' perceptions regarding overall performance for a given activity, multiple measures of some of the questions, in which respondents may have perceived different levels of performance, were combined (Dillman, 2000). Participants were instructed to consider each human resource management activity as a single construct, however, this may have resulted in being a limitation of the study if participants interpreted questions about human resource management activities as being double-barreled. The third part of the instrument was designed to gather data on demographic and personal characteristics (Haynes, 1996; Kwarteng, 1986.) Data were gathered on participants' gender, age, tenure in extension and as chair, program focus, and academic rank.

A limitation of this study was that competencies and performance were self-reported perceptions and not a test measurement of the variables themselves. Although research suggests little differences between self-reported, supervisory-reported, and expert-reported ratings of job characteristics, larger samples of ratings can lead to higher data reliability (Peterson, Mumford, Levin, Green, & Waksberg, 1997; Peterson, Owens-Kuntz, Hoffman, Arabian, & Whetzel, 1990; Fleishman, & Mumford, 1988).

Data for this study were collected using a mailed questionnaire. Dillman's (1978) general procedures for mailed questionnaires were followed. A response rate of 94% (n=90) was obtained for the study. Of the instruments returned, three were returned incomplete, resulting in a usable response rate of 91% (n=87). To control for non-response error late respondents (n=31) were compared to early respondents (n=56) on the variables: gender, age, tenure in Extension, tenure as chair, program focus, academic rank and summated human resource management competency and activity scores. No significant differences were found; therefore the results of the study are generalizable to the target population.

The instrument was pilot tested with a random sample of 30 county extension directors in Indiana. Instrument reliability was estimated by calculating a Cronbach's alpha coefficient. Reliability for part I, was .94. Reliability for part II, was .95. A panel of seven Extension and human resource management experts from Louisiana State University, Auburn University, Ohio State University, and University of Rio Grande established instrument content and face validity. The magnitude of relationships was described using Davis' convention (Davis, 1971). Inferential statistics were used to infer to Extension chairs over a period of time. Alpha for all statistical procedures was set a priori at .05. Summated human resource management competency and activity scores were computed by summing individual variables into single composite measures (Hair, Anderson, Tatham, & Black, 1998). Two benefits of using total or average scores are reduction of measurement error and less complicated interpretations of data.

### Findings

The personal characteristics of the study included gender, age, length of employment, tenure as county chair, level of education, additional training formats, program focus, and academic rank or position. The majority of respondents were male (57%). The average age of study respondents was 43. Approximately 52% of the participants were between the ages of 40 and 49 years. Twenty-eight percent of the participants were age 50 years or older. Twenty percent of the participants were between the ages of 20 and 39 years.

The average length of employment at Ohio State University Extension of county chairs was approximately 15 years. Approximately 85% of participants were employed by Ohio State University Extension for more than 5 years. Forty-seven percent of county chairs had been an Ohio State University Extension county chair for 5 years or less. The average length of tenure as an Ohio State University

Extension county chair was approximately 8 years.

A majority of county chairs (91%) had a Masters degree. A majority of county chairs had used the training formats workshops or seminar (88%), assessment center (83%), and self-directed learning (70%) to increase their human resource management knowledge. Thirty-three (38%) county chairs used the training format of shadowing or mentoring. The training format of formal classes was used by 31% of county chairs.

Twenty-nine (34%) participants were from the agriculture and natural resources program area. Twenty-three (27%) participants were from the program area of 4-H/Youth Development and an equal number from family and consumer science. Ten (12%) chairs were from community development or other areas.

### Objective 1

The first objective of the study was to describe Ohio State University Extension county chairs' perceptions of their self-reported human resource management competencies. Table 1 presents the means and standard deviations of human resource management competencies. Seven human resource management competencies had means greater than 4.0: written comprehension ( $M=4.23$ ,  $SD=.66$ ), oral comprehension ( $M=4.21$ ,  $SD=.73$ ), oral expression ( $M=4.21$ ,  $SD=.78$ ), written expression ( $M=4.17$ ,  $SD=.82$ ), information gathering ( $M=4.16$ ,  $SD=.75$ ), inductive reasoning ( $M=4.15$ ,  $SD=.76$ ), and problem sensitivity ( $M=4.09$ ,  $SD=.76$ ). The four lowest human resource management competencies means were: administration and management ( $M=3.71$ ,  $SD=.81$ ), mathematical reasoning ( $M=3.61$ ,  $SD=.99$ ), systems perception ( $M=3.53$ ,  $SD=.80$ ), and human resources ( $M=3.46$ ,  $SD=.77$ ). A human resource management competency score (74.1) was computed by summing the individual human resource management competency item responses. The average of human resource management competencies was 3.9. County chairs perceived their level of human resource competencies as high.

*Objective 2*

The second objective of this study was to describe Ohio State University Extension county chairs' perceptions regarding their self-reported ability to perform human resource management activities. The means and standard deviations of human resource management activities are presented in Table 2. The activities for which Ohio State University Extension county chairs indicated the highest means were: developing and maintaining positive work environment (M=3.85, SD=.76), administering wages and benefits (M=3.77, SD=.74), ensuring safety and health at worksites (M=3.77, SD=.77), and selecting

and hiring employees (M=3.74, SD=.78). The activities for which county chairs indicated the lowest means were: motivating employees (M=3.44, SD=.77), analyzing jobs and writing job descriptions (M=3.39, SD=.87), and appraising and counseling employees for performance (M=3.37, SD=.84). A human resource management activity score (50.1) was computed by summing the individual human resource management activity item responses. The average of human resource management activities was 3.6. County chairs perceived their level of human resource activities as good to excellent.

Table 1  
*Human Resource Management Competencies*

Human Resource Management Competency	<u>M</u>	<u>SD</u>
Written Comprehension - The ability to read and understand written information ideas.	4.23	.66
Oral Comprehension - The ability to listen to and understand information and ideas presented through spoken words and sentences.	4.21	.73
Oral Expression - The ability to communicate information and ideas in speaking.	4.21	.78
Written Expression - The ability to communicate information and ideas in writing.	4.17	.82
Information Gathering - Skill to find information and identifying essential Information.	4.16	.75
Inductive Reasoning - The ability to combines separate pieces of information, or specific answers to problems, to form general rules or conclusions.	4.15	.76
Problem Sensitivity - The ability to tell when something is wrong or is likely to go wrong. It does not involve solving the problem, only recognizing there is a problem	4.09	.76
Problem Identification - Skill to identify the nature of problems.	3.95	.68
Fluency of Ideas - The ability to come up with a number of ideas about a given topic. It concerns the number of ideas produced and not the quality, correctness, or creativity of the ideas.	3.85	.74
Identification of Key Causes - Identifying things that must be changed to achieve goals.	3.82	.74
Solution Appraisal - Skill to observe and evaluate the outcomes of a problem solution to identify lessons learned or redirect efforts.	3.82	.66
Visioning - Skill to develop an image of how a system should work.	3.80	.89
Management of Personnel Resources-Skill to motivate, develop, and direct people as they work, identify the best people for the job.	3.78	.72

Table Continues

Administration and Management - Knowledge of principles and processes involved in business and organizational planning, coordination, and execution.	3.71	.81
Mathematical Reasoning - The ability to understand and organize a problem and then to select a mathematical method or formula to solve the problem.	3.61	.99
Systems Perception - Skill to determine when important changes have occurred in a system or are likely to occur.	3.53	.80
Human Resources - Knowledge of human resource policies and practices.	3.46	.77
Average HRM Competency score	3.90	
Note: 1=Very Low; 2 =Low; 3=Average; 4=High ; 5=Very High. HRM competency score=74.1		

Table 2

*Human Resource Management Activities*

Human Resource Management Activity	<u>M</u>	<u>SD</u>
Developing and Maintaining Positive Work Environment - Creating a work environment where employees are motivated and teamwork thrives.	3.85	.76
Administering Wages and Benefits - Ensuring employees receive compensation in exchange for their work and working with the administration to determine how to value jobs and people.	3.77	.74
Ensuring Safety and Health at Worksites - Safeguarding employees against unsafe or unhealthy worksites.	3.77	.77
Selecting and Hiring Employees - For open positions, determining which applicant best meets the job requirements and recommending applicants to be hired.	3.74	.78
Recruiting and Selecting Legally - Conforming to legal requirements regarding recruiting and selection and ensuring equal employment opportunity and affirmative action requirements are being carried out.	3.60	.91
Organizing and Designing Jobs - Applying the principles and practices involved in the assignment of work to ensure efficient use of human resources.	3.57	.74
Orienting, Training, and Developing Employees - Helping employees learn about Extension and their jobs, helping employees improve performance, and helping employees deal with new responsibilities.	3.56	.69
Complying with Legal Aspects of Compensation - Carrying out Extension and University policies and procedures regarding Fair Labor Standards Act, Equal Pay Act, Civil Rights Act, Age Discrimination in Employment Act, Americans With Disability Act, and Family and Medical Leave Act.	3.55	.88
Complying with Fair Employment Laws and Regulations - Carrying out Extension and University policies and procedures regarding Equal Pay, Civil Rights, Age Discrimination, Rehabilitation, and Americans With Disabilities Acts.	3.52	.79
Planning and Developing Human Resource Policy Development- Anticipating future supply and demand for employees and developing appropriate strategies to hire and retain employees.	3.52	.71

Table Continues

Identifying and Coaching to Resolve Employee Problems - Identifying and resolving employee problems using informal and formal approaches.	3.51	.78
Motivating Employees - Effectively uses proven motivational techniques and procedures to influence others to achieve goals.	3.44	.77
Analyzing Jobs & Writing Job Descriptions - Collecting and ordering information about all jobs and developing a written job description that highlights job duties.	3.39	.87
Appraising and Counseling Employees for Performance - Providing direction and guidance to agents by helping plan and evaluate educational programs, assisting with the development of the plan of work, observing teaching, serving as a role model, and providing feedback for performance appraisal purposes.	3.37	.84
Average HRM Activity score	3.58	

Note: 1=Very Low; 2=Low; 3=Average; 4=High; 5=Very High. HRM activity score=50.1.

### *Objective 3*

The third objective of the study was to examine relationships between the Ohio State University Extension county chairs' perceptions regarding human resource management competencies and their self-reported ability to perform human resource management activities. Visual inspection of the data showed that the elliptical swarm of points tended to fall along a straight line. This led the researcher to conclude the relationship examined was linear. The correlation between the summated competency and activity score was significant with a very strong relationship between the variables,  $r(86) = .71$ ,  $p < .05$ .

### **Conclusion and Implications**

Based on the review of literature and the interpretation of findings related to the study's objectives, the following conclusions were drawn and implications given.

#### *Conclusion and Implication 1*

Ohio State University Extension county chairs perceived their level of self-reported competence as high to very high on seven human resource management competencies and average to high on 12. Although county chairs indicated high overall human resource management competencies, opportunities for growth and development exist. Using means as indicators, county chairs had the highest need for growth and development

with respect to administration and management, mathematical reasoning, systems perception, and human resources. These findings support those of Haynes (2000), who found that county Extension administrators had adequate managerial competencies to perform their job effectively.

Performance of any activity requires certain knowledge competencies. Knowledge required for a job is restricted to the information that is directly applied to the performance of an activity and is acquired through formal education, training, and experiences (Fleishman, Constanza, Wetrogan, Uhlman, & Marshall-Mies, 1995). Some human resource management knowledge, such as constructing a Markov Matrix, would almost always be acquired through formal education. Other human resource management knowledge, such as conducting an interview, may be acquired through training and life experiences. Knowledge of human resource policies and practices, including laws and regulations involved in recruiting, selecting, compensation, and fair employment, are needed to carry out human resource management activities. Human resource knowledge competencies are a fundamental concern that should be addressed continuously through a combination of formal education, training, and development. Failure of county chairs to refer to and apply generally accepted human resource management and management

knowledge might result in negative outcomes. In addition to being used as a developmental tool, Haynes (1996) recommended that competency assessment be used as a selection tool for filling county chair positions. Given the strength and direction of the correlation between competencies and performances found in this study and those of Haynes (1996) and Kwarteng (1986), Haynes' recommendation is well placed. As Smith and Clark (1987) noted, extension is in the business of finding and developing its managers.

#### *Conclusion and Implication 2*

Ohio State University Extension county chairs perceived their self-reported level of performance as good to excellent on all identified human resource management activities. Although, overall self-perceived county chair performance of human resource management activities was good to excellent, opportunities for growth and development exist. Using means as indicators, county chairs had the highest need for growth and development with respect to motivating employees, analyzing jobs and writing job descriptions, and appraising and counseling employees for performance.

County chair performance on analyzing jobs and writing job descriptions is of concern because job analysis is the most basic activity in human resource management. It is the basis from which most human resource management decisions are made (Mathis & Jackson, 2000). Although county chairs rated their performance as good on appraising and counseling performance, they also indicated it was the area where they were the weakest. This finding is consistent with other research findings. It has been found that managers have disdain for appraising employee performance because they are not properly trained, do not feel like they have control over the process, do not like to deliver negative feedback and messages, feel negative feedback and messages will adversely affect a person's career, and feel their performance will be judged unfavorably if the work of those they supervise is poor (Thomas & Bretz, 1994). Performance appraisals are often used in

motivating employees, which may help explain why motivating employees was one of the lowest rated human resource management activities.

#### *Conclusion and Implication 3*

The results of this study show that composite measures of county chair human resource management competence and performance of activities are correlated. Such information provides for valid, reliable, and legally defensible selection, training, and development criteria (Buford & Lindner, 2002). Ohio State University Extension county chairs who self-reported higher human resource management competency scores had significantly higher self-reported human resource management activity scores. Haynes (1996), Ishaya (1991), Yukl (1989), and Kwarteng (1986) found similar results when comparing managerial competencies of county chairs to success in carrying out managerial activities.

Recognizing that extension cannot centralize all human resource management functions, substantial resources are used to recruit and train Ohio State University Extension county chairs to perform front line managerial tasks (Smith & Clark, 1987). Because county chairs tend to be promoted from within based on their successes in their subject matter discipline (Patterson, 1997), competency assessment has become an important managerial developmental tool (Haynes, 1996) and provides a basis for competency based training and development. It has also been shown that competency based training programs are more flexible and durable than activity based programs (McNerney & Briggins, 1995; Lawler, 1994). These findings suggest a need for Ohio State University Extension county chair competency based training regarding human resource management.

As Parry (1998) noted, a competency model must include competencies that are correlated with performance on the job. Because competencies can be influenced by an individual's personality type, biological function, social style, and/or personal styles and values competency models must be broad enough to allow for individuals to offset weaknesses on certain competencies

with strengths on others. The correlations presented here provide the necessary empirical evidence to support an Ohio State University Extension Human Resource Management Competency Model that includes the following behavioral dimensions: written comprehension, oral expression, written expression, oral comprehension, inductive reasoning, problem sensitivity, originality, fluency of ideas, mathematical reasoning, management of personnel resources, identification of key causes, problem identification, information gathering, solution appraisal, visioning, identifying downstream consequences, systems perception, human resources knowledge, and administration and management knowledge.

### Recommendations

The results of this study provide the framework from which the following recommendations are made.

1. The results of this study can be used by The Ohio State University Extension Employee Development Network as basis for understanding the relationship between human resource management competencies performance of human resource management activities.
2. The Employee Development Network can use these results as a basis for providing targeted competency based job analysis and performance appraisal training and development programs.
3. The Employee Development Network can use these results to continue to develop and implement training and development programs on the body of knowledge pertaining to human resource management and administration and management.
4. Replication of this study with other extension services and organizations is needed to evaluate the extent to which the results presented here would be similar and recommendations applicable. Additional research related to

potentially discriminating variables that may affect the results presented here are needed.

5. Additional research is needed to study the relationship between individual variables to gain a better understanding of the interrelationships between the two composite measures.

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