Examining Ohio State University Extension Program Assistants’ Turnover Intention through Job Satisfaction, Satisfaction with Supervisor, and Organizational Commitment

DISSERTATION

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Abstract

Employee turnover and turnover intention are key indicators of human resource development practice and overall organizational leadership effectiveness. Employees’ perceptions about job satisfaction, satisfaction with supervisor, and organizational commitment are thought to be related to turnover intention. However, empirical studies that examine the relationship between job satisfaction, satisfaction with supervisor, organizational commitment and turnover intention are limited, specifically in the Extension system. Almost all Cooperative Extension employees’ turnover studies investigated Extension agents, called educators in some states, as a subject of study; however there is no research that examines turnover intention among the focus of this study, Extension program assistants.

Ohio State University Extension (OSU Extension) program assistants, are responsible for recruiting individuals for educational programs, use standardized curriculum to provide informal teaching, and use standardized evaluation instruments to assess program impact. The Cooperative Extension System is experiencing significant changes, which may affect voluntary. The purpose of this study was to investigate the influence of demographics, job satisfaction, satisfaction with supervisor, and organizational commitment on turnover intention for Extension program assistants.
The quantitative research methodology was based on the descriptive–exploratory study and correlational research design. The target population for this study was full time OSU Extension program assistants. An online survey was used to collect data from 149 OSU Extension program assistants. Respondents were asked to provide their perceptions and feelings related to their job satisfaction, satisfaction with supervisor, organizational commitment, and turnover intention. Data analysis involved the use of descriptive statistics, chi-squared test of independents, correlation analysis, binary linear regression, hierarchical multiple regression approach, and Hayes Sobel test to measure mediation effects.

Findings from this study indicated that job satisfaction, satisfaction with supervisor, organizational commitment, employee’s age, and years of service relate to employee turnover intention. Younger employees and employees with less years of service tended to have higher turnover intention. Lower levels of organizational commitment, job satisfaction, and satisfaction with supervisor among OSU Extension program assistants tended to predict employee intention to leave.

The results of this study are consistent with previous research suggesting that job satisfaction, satisfaction with supervisor, organizational commitment, age, and years of service are important predictors of employee turnover intention. Monitoring and diagnosing employees’ perception and attitude as related to job withdrawal behavior are important HR actions towards the retention of OSU Extension employees. The findings from this study could be used as guidelines for the OSU Extension personnel development and organizational policy. Future quasi-experimental and longitudinal
research is need to predict actual turnover. Recommendations for leaders, managers and supervisors in OSU Extension include: renew HR procedures and policies for recruitment, offer professional development for program assistants and their immediate supervisors, and improve retention strategies. Investing in strategies to reduce turnover intention among Extension program assistants will help fulfill Extension’s long term mission.
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Chapter 1 Introduction

This dissertation research examined the influence of key variables on turnover intention of employees in Ohio State University Extension (OSU Extension). The study specifically explored the influence of demographics, organizational commitment, job satisfaction, and satisfaction with supervisor on turnover in the job group called program assistants.

Chapter 1 of this dissertation sets the stage with background on turnover issues including concerns specific to Extension organizations and provides a brief overview of the literature regarding major predictors of employee turnover — such as organizational commitment, job satisfaction, and satisfaction with supervisor. This chapter also includes the research problem, specific research questions, an overview of the methodology, and the importance of the proposed study. Finally, the chapter concludes with definition of terms, limitations, delimitations, and assumptions.

Background

Employee turnover and turnover intention are important factors in human resource development practice and key indicators of overall organizational leadership effectiveness (Guzzo & Dickson, 1996; Koys, 2001). In 2003, Ramlall studied employee retention strategies of successful organizations, concluding that “86 percent of employers experience difficulty attracting new employees and 58 percent experience difficulty
retaining their employees” (p. 63). Organizational success depends on how early an organization can predict an employee’s withdrawal behavior and actual turnover (Bedeian, Kemery, & Pizzolatto, 1991; Griffeth, Hom, & Gaertner, 2000). The following sections below explore turnover challenges in Extension organizations and key predictors that influence employee’s turnover and turnover intention.

**Turnover Challenges in Extension Organization**

With the passage of the Smith-Lever Act in 1914, the Cooperative Extension Service was established to fulfill a land-grant university mission. Cooperative Extension assists people in solving their daily problems through a variety of educational programs. For more than 100 years, Extension professionals have been delivering programs in 4-H youth development, community and economic development, family and consumer sciences, and agricultural and natural resources to diverse clientele groups. OSU Extension fulfills the land-grand university mission by “Engaging people to strengthen their lives and communities through research-based educational programing” (OSU Extension Strategic Plan 2008, p. 3). The Extension “spirit” reflects organizational values such as excellence in educational programming; grassroots programs that engage local people in solving problems and addressing challenges; unbiased research-based information; practical education that helps people help themselves; timely responses to clientele concerns; credibility with clientele and funders; honesty and integrity in the work, teamwork within offices, with clientele, and with our educational partners; flexibility/adaptability in local programming; programming without discrimination and
employing people who represent the diverse population of Ohio (OSU Extension Strategic Plan 2008, pp. 3-4).

There are two different job groups that represent a large majority of Extension professionals: Extension educators and Extension program assistants. As of November 23, 2016 there were 190 Extension educators and 182 program assistants employed by OSU Extension. An Extension educator is a university Extension employee who develops and delivers educational programs in the four program areas to help improve life in rural and urban areas. Extension program assistants are key employees of OSU Extension. Extension program assistants represent first-line Extension professionals who have variety responsibilities within organization. Program assistants recruit adults and children for the educational program by collaborating with local community organizations and programs, also they provide informal teaching in one of the four Extension program areas using standardized curriculum materials. In addition they assess program participants’ perceptions, behavior changes, attitudes, and knowledge to determine a program’s impact and future educational needs of the community using standardized evaluation instruments (OSU Extension program assistant job description, career at Ohio State, Retrieved from https://www.jobsatosu.com/postings/72417, August 25, 2016).

Previous research emphasized that Cooperative Extension is adversely impacted by voluntary employee turnover among Extension educators (Ensle, 2005; Kutilek, 2000; Safrit, & Owen, 2010; Strong & Harder, 2009). Many different challenges in the workplace that increase turnover among Extension employees were described (Ensle,
2005; Lyles & Warmbrod, 1994). For example, “the job offers a flexible work schedule, but requires many night and weekend meetings … endless paperwork with unrealistic due dates …” Ensle (2005, p. 1). Cooper and Graham (2001) noted that “diverse assignments require diverse competencies. To be successful the agents must have increased technical potential in more than one program area” (p. 1). For the period 2007 through 2009, the voluntary turnover rate among Virginia Cooperative Extension educators varied from 14.1 to 20.2 percent (Martin, 2011). North Carolina Cooperative Extension faced critical issues in their 4-H program area when 31 percent of the Extension agents who were hired between 2006 and 2009 left the organization (Safrit & Owen, 2010, p. 2). Safrit and Owen (2010) noted that “turnover among Extension educators results in unmet citizen needs, disrupted educational programs, low morale among remaining Extension professionals, and wasted financial and material resources” (p. 1). An OSU Extension study (Kutilek, 2000) reported that Extension educators’ replacement costs are $80,000 for the organization. According to Young, Stone, Aliaga, and Shuck (2013) “a 1-percent-point increase in the overall retention rate of Extension agents nationwide (i.e., 80 agents x $80,000 agent replacement cost) could reduce the Extension System’s organizational expenses by $6.4 million dollars annually” (p. 2). However, there are no empirical studies to assess the impact of Extension program assistants’ turnover in the Extension organization.

As described above program assistants represent nearly half of the employees who directly engage with the public in conducting programming. While there is little data in the literature on turnover in this job group, evidence exists suggesting turnover is a
According to Amy Burns (personal communication, October 29, 2015 and August 17, 2016), HR Generalist of OSU Extension, the grand total turnover rate at OSU Extension was 23.9 percent in 2007, 17.5 percent in 2008, 13.1 percent in 2009, 13.9 percent in 2014 and in 2015 it was 12.1 percent. In 2015, the turnover rate among Extension educators across all program areas was 7 percent, while among Extension program assistants it varied greatly. For example, in 2015 the turnover rate for Extension program assistants in Agriculture and Natural Resources turnover was 57.1 percent, for 4-H was 25.5 percent, and for Family and Consumer Science was 13.3 percent. This data revealed that the turnover among Extension program assistants was much higher as compared to Extension educators. That is why it is so important to investigate the factors that affect high turnover rate among Extension program assistants.

**Understanding Turnover**

Employee turnover intention has become a major problem for organizations today (Chen, Lin, & Lien, 2010). William Mercer Inc. (Pinder, 2008) found that 45 percent of companies spend more than $10,000 to replace an employee, while 20 percent indicated that the turnover cost was $30,000 and higher per employee. Turnover costs involve “recruiting and placing people, training them, and waiting until the costs they represent are offset by the value they contribute once they are up to speed” (Pinder, 2008, p. 280). Price (1997) defined turnover as “the degree of individual movement across the membership boundary of an organization. The individuals involved are employees, and the movement can be either into (accessions) or out of (separations) the organization” (p. 532). Often turnover intention predicts actual quitting behavior (Griffeth, Hom, &
Gaertner, 2000; Hom, Caranikas-Walker, Prussia, & Griffeth, 1992). Bedeian, Kemery, and Pizzolatto (1991) indicated that turnover intention has a causal relationship with actual turnover. Mobley (1977) and Mobley, Horner, and Hollingsworth (1978) emphasized that increased turnover intention increases actual turnover. Much research has been conducted to study the relationship between an employee’s perceptions and attitudes (e.g., organizational commitment, job satisfaction, stress or burnout, job characteristics) with behavioral factors (e.g., turnover intention, actual turnover) (Griffeth, & Hom, 1995; Griffeth, Hom, & Gaertner, 2000; Hom, Caranikas-Walker, Prussia, & Griffeth, 1992; Zhao, Wayne, Glibkowsi, & Bravo, 2007).

One of the important questions is how the organization can predict an employee’s decision to quit and then reduce or prevent that intention. Employees may leave the job “for a number of reasons”, there are several cognitive and attitudinal stages between employee job satisfaction and decision to leave (Mobley, 1977). Mobley concluded that job dissatisfaction has a strong positive correlation with turnover. Other factors, such as work alternatives, job search, and resignation action, act as turnover antecedents. Thus, Mobley (1977) identified the following variables that affect actual turnover: job satisfaction/dissatisfaction, thinking of quitting, intention to search, probability of finding an acceptable alternative, and intention to quit. Fishbein and Ajzen (2011) and Igbaria and Greenhaus (1992) mentioned that intention to quit was one of the important determinants of actual turnover behavior. Turnover models will be discussed in greater detail in Chapter 2. Three variables emerge as particularly important to understanding
intention to quit or turnover: organizational commitment, job satisfaction, and satisfaction with supervisor.

**Organizational Commitment**

In 1974, Porter, Steers, Mowday and Boulian developed the theory of organizational commitment. The authors indicated that attitudes toward the organization have a greater effect on an employee’s decision to quit the job than an employee’s attitude toward the work itself. Organizational commitment is a key predictor of employee withdrawal behavior (Griffeth et al., 2000; Herscovitch & Meyer, 2002). Angle and Perry (1981) found that uncommitted employees are more likely to leave the organization. There is a significantly negative relationship between organizational commitment and an employee’s intention to leave the organization (Addae, Praveen Parboteeah, & Davis, 2006; Pare & Tremblay, 2007).

Generally, organizational commitment has been defined by behavioral and attitudinal perspectives. Mowday, Steers, and Porter (1979) provided an explanation of the behavioral focus of organizational commitment through an individual’s action (or alternative actions) at the work place and link with the organization. The attitudinal approach of organizational commitment was described when an individual identifies him or herself with organizational goals and wants to maintain membership with the organization (Mowday, Steers & Porter, 1979).

Meyer and Allen (1991) extended the approach by Mowday et al. (1982) and presented basic postulates (Figure 1.1) of organizational commitment. The authors
incorporated the two approaches discussed above regarding attitudinal and behavioral commitment, and attempted to describe their complementary associations.

The authors expanded the psychological state beyond the values and goals; their theory reflected a need, a desire, and an obligation toward other aspects of commitment. Meyer & Allen (1991) used the term “commitment” as a psychological state, while the
term “behavioral commitment” referred to behavioral persistence. They developed a three-component framework where they considered “affective,” “continuance,” and “normative” commitment as types of commitment. Next subsection will discuss about job satisfaction and satisfaction with supervisor as another major predictors of employee turnover intention.

**Job Satisfaction and Satisfaction with Supervisor**

Previous research has shown that job satisfaction and satisfaction with supervisor are important variables related to turnover. Job satisfaction/job dissatisfaction has a moderate linear relationship with turnover (Griffeth, Hom, & Gaertner, 2000; Hom & Griffeth, 1995). Hofaidhllaoui and Chhinzer (2014) conducted research on 481 engineers in France examining the relationship between two independent variables—satisfaction with supervisor and satisfaction with job—to predict turnover. They reported strong and negative correlations between satisfaction with supervisor and turnover, and between satisfaction with work and employee turnover. The authors concluded that satisfaction with work and satisfaction with supervisor are key predictors in employee withdrawal behavior.

Definitions of job satisfaction and satisfaction with supervisor have evolved over time. In 1969, Locke attempted to explain job satisfaction using Rand’s theory of emotions. He discussed five concepts such as value, emotion, appraisal, satisfaction, and dissatisfaction, and measured their interrelationships. Locke explained job satisfaction and job dissatisfaction as “a complex emotional reaction to the job” (p. 314). He defined job satisfaction and dissatisfaction as “a function of the perceived relationship between
what one wants from one’s job and what one perceives it as offering or entailing” (Locke, 1969, p. 316). Spector (1985) assessed an employee’s job satisfaction through nine dimensions namely, pay, promotion, fringe benefits, contingent rewards, operating conditions, co-workers, nature of work, satisfaction with communication, and satisfaction with supervisor. According to Scarpello and Vandenberg (1987) satisfaction with supervisor indicates the degree of satisfaction with the immediate supervisor and is different than being satisfied with work environment and the work itself.

**Problem Statement**

A number of turnover studies related to Cooperative Extension organizations have been conducted over the last 35 years. The Extension Committee on Organization and Policy Leadership Advisory Council of the National Association of State Universities and Land-Grand Colleges systematically provided recommendations to Extension administrators regarding employee turnover and retention issues, some of which are listed below:

1) “Critically examine policies and practices in relation to their effects upon the family life of Extension employees” (ECOP, Task Force, 1981, p. 3)

2) Modify organizational policies and practices that cause stress, and implement effective balancing work and family programs. (ECOP LAC 2002)

3) Extension employee retention was identified as a major internal challenge for Cooperative Extension Organization (ECOP LAC, 2005).
4) Strengthening Extension personal will help the organization facilitate future changes (ECOP LAC, 2007).

Safrit and Owen (2010) emphasized that Cooperative Extension has experienced employee turnover and retention issues for more than two decades. This problem is a chronic challenge for the entire Extension system nationwide. The results of previous research identified many factors related to employees’ turnover and turnover intention, namely heavy work load, burnout, occupational stress, balancing work and family life, low salary, work hours, late night meetings, lack of recognition, high requirements for advancement, organizational commitment, job satisfaction, organizational justice, and other factors (Clark, 1981; Clark, Norland, & Smith, 1992; Harder, Gouldthorpe, & Goodwin, 2015; Holtom, Mitchell, Lee, & Eberly, 2005; Kutilek, 2000; Rousan & Henderson, 1996; Sears Jr, Urizar Jr, & Evans, 2000; Strong & Harder, 2009; Safrit, & Owen, 2010; Young, Stone, Aliaga, & Shuck, 2013; Van Tilburg, 1987; Van Tilburg, 1988).

Almost all Cooperative Extension employee turnover studies investigated Extension agents, called educators in some states, as a subject of study; however there is no research that examines turnover intention among Extension program assistants. In OSU Extension, there are 367 full-time Extension educators and program assistants with almost 50% in the program assistant job classification. An Extension educator is a university Extension employee who develops and delivers educational programs across program areas, while Extension program assistants are employed by an Extension organization to use the developed curriculum to provide teaching services. Lee and
Mitchell’s (1994) “Unfolding Model of Voluntary Turnover,” pointed out that employees in different job categories are more likely to pursue their decision to quit a job differently. Based on the Lee and Mitchell’s statement above, the researcher assumes that Extension program assistants pursue their decision to leave a job differently compared to Extension educators. That is why it is important to examine turnover intention among Extension program assistants. Gaps also exist in the literature regarding the interactive effects (moderation and mediation) among investigated variables across turnover models (Jaclofsky, 1984; March & Simon, 1958; Mitchell & Lee, 2001; Mobley, 1977; Porter & Steers, 1973; Price 2001). Thus, it is expedient to examine mediation effects of intervening variables (organizational commitment and satisfaction with supervisor) on relationships between job satisfaction and turnover intention that have not been researched previously in the Extension field.

**Purpose and Research Question**

The purpose of this study was to investigate the influence of demographics, job satisfaction, satisfaction with supervisor, and organizational commitment on turnover intention for Extension program assistants. Four research questions guided this study:

1. What is the relationship between employee turnover intention and selected demographics such as age, gender, degree level, program area, marital status, children living at home, and number of years working in the organization?

2. What is the relationship between turnover intention and the independent variables organizational commitment, job satisfaction, and satisfaction with supervisor?
3. To what extent does satisfaction with supervisor predict employee turnover intention, controlling for age and years of service?

4. To what extent do organizational commitment and satisfaction with supervisor mediate the relationship between job satisfaction and turnover intention?

**Overview of Methodology**

The nature of this research was quantitative and correlational, using a cross-sectional survey. The main focus was to explore the relationships between a dependent variable (turnover intention) and independent variables (organizational commitment, job satisfaction, and satisfaction with supervisor). To address the research questions, a descriptive exploratory and correlational design was utilized. Data were collected from Extension program assistants in the state of Ohio using an online survey questionnaire. Data were analyzed using descriptive statistics, analysis of variance, multiple regression, hierarchical regression analyses and Hayes Sobel test. Detailed methodology for this study is presented in Chapter 3.

**Importance of Proposed Study**

Results from this study will contribute to the scientific base by providing heuristic evidence of associations between the variables of organizational commitment, job satisfaction, satisfaction with supervisor, and turnover intention within the context of a complex, geographically dispersed organization. Furthermore, this study will contribute to the scientific base by determining the mediating effects of both organizational commitment and satisfaction with supervisor on the relationship between job satisfaction and turnover intention.
Turnover intention is a key concern for many organizations. The findings from this investigation provide a contemporary look at non-profit organizations and how perceived organizational commitment, job satisfaction, and satisfaction with supervisor, may influence their employees’ turnover intentions. From the human resource management and development perspective, this study will offer HR practitioners a better understanding of individual’s intention to leave the organization and factors that affect it. A deeper understanding of those factors and relationships will help improve human resource practices related to employee retention.

High turnover rates among employees is a serious issue that is associated with replacement costs and organizational effectiveness. Different challenges in the workplace increase turnover among Extension employees (Ensle, 2005; Lyles & Warmbrod, 1994). OSU Extension program assistants are one of the important job groups for the organization. These employees have job responsibilities from client recruitment to program delivery and evaluation. Turnover rate among program assistants is much higher compared to Extension educators at OSU Extension. Therefore, it is extremely important to investigate what factors affect Extension program assistant turnover intention that will help to predict actual turnover and influence efforts to retain this group of Extension employees.

Findings from this study will specifically help OSU Extension administrators to explain the nature of relationships among demographic variables and employees’ turnover intention; relationships between turnover intention and independent variables such as organizational commitment, job satisfaction, satisfaction with supervisor; and
mediating effects of Extension employees’ organizational commitment and satisfaction with supervisor on the relationship between job satisfaction and turnover intention. Furthermore, the results of this study will help predict early turnover among Extension program assistants and develop retention strategies for this group of Extension employees.

**Definition of Terms**

The following definitions were used in this study:

**Employee turnover** - In 1985, Rossano defined turnover as the voluntary termination of participation in employment for an organization, excluding retirement, or pressured voluntary withdrawal, by an individual who received monetary compensation from the organization.

**Extension educators** - An Extension educator is a university Extension employee who develops and delivers educational programs in the following program areas—agriculture and natural resources, 4-H youth development, community development, family and consumer science—to help improve their life in rural and urban areas.

**Extension professional** - “An Extension professional is any individual employed by an Extension organization” (Cochran, 2009, p. 7).

**Job satisfaction** – “Job satisfaction is a pleasurable or positive emotional state resulting from the appraisal of one’s job or job experiences” (Locke, 1976, p. 1304). In this study, job satisfaction was measured using Spector’s (1985) Job Satisfaction Questionnaire through satisfaction with pay, promotion, rewards, fringe benefits, co-workers, nature of work, communication (excluding satisfaction with supervisor).
**Extension program assistants** – Extension program assistants in this study represent all Ohio State University Extension employees in the job classification “Program assistant” and who work in a county Extension office. OSU Extension program assistants are responsible for recruiting individuals for an educational program, use standardized curriculum materials to provide informal teaching, and use standardized evaluation instruments to assess a program’s participants’ knowledge, attitude, and behavior.

**Organizational commitment** - Organizational commitment is the relative strength of an individual’s identification with and involvement in a particular organization. It can be characterized by at least three related factors: (1) a strong belief in and acceptance of the organization’s goals and values; (2) a willingness to exert considerable effort on behalf of the organization; and (3) a strong desire to maintain membership in the organization (Mowday, Steers, & Porter, 1979, p. 226).

**Turnover intention** - Turnover intention is a relative strength of an individual’s intent toward voluntary permanent withdrawal from an organization (Hom & Griffeth, 1991).

**Supervisor** – is “an individual who is responsible for defining the subordinate’s role and ensuring that the assigned task are performed” (Scarpello & Vandenburg, 1987, p.462).

**Satisfaction with supervisor** - in this study, satisfaction with supervisor is defined as the “three types of skills required for effective supervision namely, technical, human relation, and administrative” (Scarpello & Vandenberg, 1987, p.462).

**Assumptions**

The following assumptions underlie this study:

1. Respondents will give clear and honest answers to questions.
2. Turnover intention expected to be is a predictive of actual turnover.

**Limitations and Delimitations**

The following limitations and delimitations were acknowledged when undertaking this study:

1. The population of the research was limited to the OSU Extension program assistants who work at the county level. Other OSU Extension employees, such as Extension specialists, Extension administrative employees, county Extension directors, Extension educators, program coordinators, office associates, and other support staff, were not included in this study.

2. This study only included full-time employees, where full-time employees are individuals who held 75 percent or higher appointment within OSU Extension.

3. This study used a census of the OSU Extension program assistants. All respondents represented a convenience sample.

4. This study was chosen to look the limited set of variables namely, organizational commitment, job satisfaction, satisfaction with supervisor, and demographic variables; not all possible factors that affect turnover intention were discussed in this study.

5. The independent variables “organizational commitment and satisfaction with supervisor” served as a potential factor that affects turnover intention, and also were examined as intervening variables that mediate the effect on the relationship between job satisfaction and turnover intention.

6. Participants were asked to reflect their feelings and perceptions regarding organizational commitment, job satisfaction, satisfaction with supervisor, and intention to leave the
organization, and then answer demographic questions. Thus, the instrument questions are personal in nature and contain participants’ biases.

7. These findings cannot be generalized to all Extension program assistants across the states because a state census approach was utilized.
Chapter 2 Literature Review

The purpose of this study was to examine the relationship among independent variables (i.e., organizational commitment, job satisfaction, and satisfaction with supervisor) and the dependent variable turnover intention. Another aspect was to investigate the mediation effect of employees’ organizational commitment and satisfaction with supervisor on the relationship between job satisfaction and turnover intention. The literature review begins by examining the nature of Extension work, Extension employees’ key competencies, factors affecting employee turnover in Cooperative Extension, and barriers associated with Extension professionals’ turnover behavior. A few turnover models and the set of key variables related to turnover are then discussed, with a deeper dive on major variables from research on turnover intention: organizational commitment, job satisfaction, satisfaction with supervisor, and turnover. Finally, the mediating effect of organizational commitment and satisfaction with supervisor in previous turnover studies is reviewed. The chapter concludes with a conceptual model derived from the literature review.

Agricultural Extension History in Brief

The ultimate goal of education is to develop an individual who can evaluate and solve the problems of daily life. Agricultural and Extension Education as a form of non-formal teaching and learning was grounded on the problem solving approach starting in
the late days of the 19th century. Dewey believed that education should build on that which was already known (Dewey, 1938). Agriculture was first formally taught in the U.S territory in 1732, when colonists in Georgia hired the first teacher to instruct them in agricultural techniques (Moore, 1987). Mainly private schools in many states had some formal and/or informal agricultural education, but the Morrill Act of 1862 placed agricultural courses at the college level (National Research Council, 1988). The Morrill Act democratized higher education, created the land grant college system, and provided funding for education in the “agricultural and mechanical arts” (Moore, 1987). In 1887, the Hatch Act developed the agricultural experiment stations for research at the federal and state levels and impacted a new knowledge dissemination to farmers (Hillison, 1996).

For more than a hundred years, Congressional districts schools flourished until the early 1900s. The agricultural education course was taught at the same time as other subjects (Hillison, 1989). Congressional district schools were developed in Alabama, Georgia, and Virginia for the established purpose of training agricultural educators (Hillison, 1989). In other states, agricultural teachers received their professional training at regular schools as well as at the land grant colleges (Hillison, 1989). The Smith-Lever Act of 1914 created the Cooperative Extension System. This Act added the third piece to the puzzle of higher education (1862 Morrill Act), agricultural research (1887 Hatch Act), and education/outreach (1914 Smith-Lever Act). A newly created Cooperative Extension System was an agreement between federal, state, and local governments to disseminate research findings from land grant colleges and research experimentation stations to the citizens of the state (Hillison, 1996; Hyman, 2008).
Nature of Extension Work

In 2014, Cooperative Extension celebrated its 100th anniversary. Extension programs benefit tremendously from the over 100 years of “visibility, particularly with respect to institutional and political relations at the community level” (Hiller, 2005, p. 1). Extension organizations develop and lead relationships with clientele in rural and urban communities and help sustain Extension programs. “Extension programs exist in 3,057 counties across the nation, staffed by 8,987 FTEs (full-time employees) at the county level—including U.S. territories” (Hiller, 2005, p. 1).

Extension organizations provide research based educational programming to vary range of urban and rural audiences. The modern Extension system addresses clientele needs in the following four program areas: (1) Agriculture and Natural Resources, (2) 4-H Youth Development, (3) Family and Consumer Science, and (4) Community and Rural Development. In 2014, Gould, Steele, and Woodrum published an article “Cooperative Extension: A Century of Innovation” in the Journal of Extension. The authors emphasized that over the last decade the Cooperative Extension diversified its portfolio as a response to society requests and needs, such as a new online environment - “the cloud,” the new needs of urban clientele, organic production, and regional or local food systems.

In 2016, Martin discussed how Extension professionals need to adapt to working in a society with changed agricultural values and diverse, divergent, and broad audiences. He provided an example—a dialog between rural and urban residents and their preferences regarding conventional and nonconventional agriculture. He suggested that
Extension professionals need to be “more sensitive and skilled in working with people who have strong dispositions toward particular agricultural values” (Martin, 2016, p. 1). Martin (2016) suggested that, to work effectively, Extension professionals should develop a “solid understanding of their own agricultural preferences” and “present their positions in responsible and respectful ways … allowing a variety of agricultural ideas to be debated and to flourish” (p. 1).

Extension employees need certain competencies to successfully deliver relevant and quality Extension programs to individuals and communities. Several Extension studies were conducted to identify individual, interpersonal, and business-related competencies that explain the nature of Extension work. Cochran (2009) developed and validated a comprehensive competency model for OSU Extension that included 24 competencies: Extension teaching; program planning; research and evaluation skills; conflict management; managing resources; risk management; volunteer management; customer service; communication; interpersonal skills; leadership; teamwork; autonomy; flexibility/adaptability; problem solving; thinking; creativity; visionary; learning; professionalism; technology adoption and application; understanding the Extension Organization; understanding organizations and communities; accountability; diversity/cultural competencies; technical expertise; and subject matter expertise.

Scheer, Ferrari, Earnest, and Conners (2006) identified a set of 10 well-trained Extension educators’ competencies, namely: (1) the foundation and history of Extension; (2) technology; (3) communications; (4) program development; (5) applied research; (6) diversity and pluralism; (7) marketing and public relations; (8) theories of human
development and adult education; (9) risk management; and (10) community development process and diffusion. Boyd (2004) identified 33 competencies expected from Extension agents; among them are a positive organizational culture, strong personal skills, organization and system leadership, and skills related to volunteer management. Summarizing, competency studies in Extension organizations showed that Extension employees need certain competencies to recruit, deliver, and evaluate Extension programs.

Arnold and Place (2010) conducted qualitative research on 12 Florida agricultural Extension agents and examined why agricultural agents pursue an Extension career. They identified six factors that influence an agent’s decision, namely: individual background, service to agricultural community, career contact, position fit, nature of Extension work, and university-supported education. Authors emphasized that agents expected work with challenging situations, solving problems to help people, working with people and providing practical recommendations. However, authors mentioned that lack of clear job expectation for newly hired agents was very frustrating (Arnold and Place, 2010).

Previous Studies on Employee Turnover in Extension Field

In general, research on turnover examines various variables and the impact on turnover intention as a proxy for actual turnover. (Abrams, Ando, & Hinkle, 1998; Griffeth, Hom, & Gaertner, 2000; Hom, Caranikas-Walker, Prussia, & Griffeth, 1992; Mueller, Boyer, Price, & Iverson, 1994). In 1985, Rossano defined turnover as “the voluntary termination of participation in employment for an organization, excluding
Motivation was found as a “core driver” of employee behavior in the workplace (Cho and Lewis, 2012). Howard and Frick (1996) emphasized that job satisfaction is a multifaceted construct that combines both extrinsic and intrinsic motivation in the workplace. Intrinsic motivation in the workplace decreases turnover intention by increasing job satisfaction and decreasing emotional exhaustion (Richer, Blanchard, & Vallerand, 2002). Pay, promotion, and work autonomy were found as values preferred by employees; however, unmet expectations accumulate less job satisfaction (Pearson, 1991).

Van Tilburg and Miller (1987) conducted a research on 244 Ohio Cooperative Extension Service county agents to identify various factors that affect the formation of intention to leave the job. The majority of county agents had a moderate-to-high level of job satisfaction; however, some agents were not satisfied with pay and promotion. 4-H youth county agents had a lower level of satisfaction with the job itself and pay. Van Tilburg and Miller suggested that Cooperative Extension administration should work to provide rewards like “… pay, promotion, formal recognition, and improved environmental conditions” to their employees (Van Tilburg & Miller, 1987, p. 11). Mobley (1982) wrote that employee turnover is "the cessation of membership in an organization by an individual who received monetary compensation from the organization” (p. 10). He discovered that there are three major causes that influence an
employee’s intention to leave the organization: (1) external factors, (2) organizational factors, and (3) individual factors.

In 1996, Rousan and Henderson modified Mobley’s turnover model and examined the reasons why 67 Ohio State County Agents left their job during the period of December 1, 1990 to December 31, 1994. Data were collected from the former employees’ personal files and mailed questionnaires; the response rate was 91%. The authors found several factors that affected Ohio State Cooperative Extension former employees’ decisions to leave the organization, namely “other priorities in their lives, another job offer, insufficient pay for the amount of work performed, family obligation, too many late night meetings, too many work responsibilities, conflict with personal responsibilities, no time for personal relationships, too many requirements for advancement, conflict with values, and lack of recognition for a job well done” (Rousan & Henderson, 1996, p. 60). In 2011, Kroth and Peutz conducted a Delphi study on 46 key Extension educators who participated in two classes provided by Western Extension Leadership Development program in order to identify and prioritize workplace issues that relate to employee attraction, motivation, and retention. They found three major categories that Extension educators identified as workplace issues: (1) competitive salary and benefits, (2) a supportive work environment, and (3) balancing work and life.

Organizational commitment was defined as an exchange relationship between the organization and the individual that includes affective commitment (desire), normative commitment (obligation), and continuous commitment (perceived expenses associated with leaving) (Van Knipperberg & Sleebos, 2006). Flint, Haley, & McNally (2013)
examined affective commitment as a part of organizational commitment. Their study suggested that organizations need to address problematic work issues and procedures, and improve interpersonal relationships between employees and supervisors to reduce turnover intention among employees.

Previous studies in Extension organizations found that organizational commitment and job satisfaction were key indicators of turnover intention (Carter, Pounder, Lawrence, & Wozniak, 1990; Mowday, Koberg, & McArthur, 1984; Strong & Harder, 2009). In 1989, Carter, Ponder, Lawrence, and Wozniak investigated variables associated with organizational turnover intention among 261 Extension Agents in Louisiana Cooperative Extension. They found that organizational commitment (desirability of movement) is the strongest single predictor of turnover intention.

Riggs and Beus (1993) reported six factors that are associated with Extension work satisfaction namely, (1) the job itself; (2) fringe benefits; (3) authority to run programs; (4) supervisors; (5) salary; and (6) opportunity for growth. Harder, Goldthorpe, and Goodwin (2015) conducted research on 140 Extension professionals in Colorado to examine employees’ career satisfaction. They found that approximately 15% of participants reported they were somewhat or very dissatisfied with their job, and 5.2% reported neither satisfied nor dissatisfied.

A variety of studies have been conducted to explore the relationship between Extension agents’ burnout, stress, work and life balance, job satisfaction, and employee retention (Clark et.al., 1992; Fetsch & Kinnington, 1997; Ensle, 2005; Harder, Gouldthorpe, & Goodwin, 2015; Place & Jacob, 2001). In 1983, Whaples emphasized
that “Poor morale, job dissatisfaction, burnout, and agent turnover continue to plague Extension in many states” (p. 1). Clark (1992) examined stress, burnout, job satisfaction, and the intent to leave of 77 Cooperative Extension Service directors using a mail questionnaire. Participants reported that the highest area of burnout (20%) was in the area of personal accomplishment. Role overload (65.2%) and role responsibility (60.3%) were major stress indicators. The author concluded that a “higher level of burnout was associated with higher stress and strain levels and lower personal accomplishment (Clark, 1992, p. 2).

This literature review revealed that there are many factors that influence Extension employees’ turnover intention. Factors such as job satisfaction, satisfaction with supervisor, organizational commitment are important predictors that influence an individual’s decision to leave the job.

**Turnover Models**

For over 60 years, social scientists have studied turnover phenomena to better understand an employee’s mindset regarding turnover intention and attitude toward the job. Employee decisions to quit the organization became an important topic in service-based organizational research. High turnover rates negatively impact organization productivity and effectiveness (Dalton, Krackhardt, & Porter, 1981; Long, Perumal, Ajagbe, 2012). Moody (2000) indicated that the estimated cost of employee turnover varies in range from 100-300% of the employee’s annual salary for the organization. Organizations are concerned with how to keep high-performing employees and stimulate innovative organizational behavior (Chiu, Lin, Tsai, & Hsiao, 2005).
Before 1980, key turnover models that were developed created a solid foundation for future research on turnover and turnover intention. March and Simon (1958), Porter and Steers (1973), Mobley (1977), Jackofsky (1984), and Price (1977) were among most influential scientists in turnover research. The literature review showed the existence of general agreement on the variables that affect employee voluntary turnover and turnover intention. There is also general agreement that employee turnover intention is the best predictor of actual turnover behavior (Mowday, Koberg, & McArthur, 1984; Steele & Ovalle, 1984). However, a gap exists with regards to the degree of effect, direction, path, and the interactive effects (moderation and mediation) found among investigated variables across turnover models (Jackofsky, 1984; March & Simon, 1958; Mitchell & Lee, 2001; Mobley, 1977; Price, 2001; Porter & Steers, 1973). Key turnover models are explored below.

**March and Simon (1958) Decision to Participate or Turnover Model**

The March and Simon turnover model influenced most turnover studies (Perez, 2008). In their classic book “Organizations,” March and Simon (1958) discussed the theory of organizational equilibrium and balancing organizational and employee’s contribution. March and Simon’s “turnover” or “decision to participate” model explains employee motivation through variables “desirability or ease of movement in and out of the organization” (Long, Ajagbe, Nor, & Suleiman, 2012). The model explains the relationship between factors, both direct and indirect, influencing turnover intention and describing the process of turnover (See Figure 2.1). In the “decision to participate” model, the employee’s decision to leave was affected by following two variables: (1)
“perceived easy movement” which is associated with perceived opportunities or alternatives; and (2) “perceived desirability of movement” which is associated with an employee’s job satisfaction (Morrell, Loan-Clarke, & Wilkinson, 2001).

Figure 2.1 Decision to participate simplified model from March and Simon (1958, p.99)

Both factors independently affect an employee’s motivation to quit the job. Moreover, March and Simon (1958) differentiated employees’ by gender, age, and tenure. One limitation is that the model sees motivation only through job satisfaction. Other factors such as the role of stress (Kemery, Bedeian, Mossholder, & Touliatos, 1985, Morrell et al., 2001) and organizational commitment (Allen & Meyer, 1990) were not considered in the turnover process. Morrell et al. (2001) emphasized that the March
and Simon model demonstrates a static viewpoint of turnover rather than procedural. The role of burnout and organizational commitment need to be included in the turnover model to better understand the factors’ influence on employee’s turnover intention.

**Mobley’s (1977) Turnover Model (Intermediate Linkage Model)**

Mobley (1977) developed an employee turnover model that was based on March and Simon’s approach. Mobley went further and presented a comprehensive model that added psychological elements in the turnover process explaining job dissatisfaction through “withdrawal condition” of employees in the turnover process. Mobley’s framework better explains the employee’s withdrawal based on the cognitive process of understanding job satisfaction and intention to leave the job as illustrated in Figure 2.2. There are three variables that described withdrawal behavior, namely: (1) thinking of quitting refers to when employee considers quitting the job; (2) intention to search refers to employee’s decision to look for job alternatives outside the organization; (3) intention to quit refers to an employee’s decision to leave the organization sometime in future.

Mobley, Horner, & Hollingsworth (1978) explained the process of evaluating an existing job as an emotionally-based experience of understanding job satisfaction and dissatisfaction. Job dissatisfaction associates with employee’s quitting behavior, exploring alternative opportunities, developing an employee’s turnover intention. Mobley et al. examined the moderation effect on the employee’s intention to leave the job. He hypothesized that non-work values moderates the effect between turnover intention and
job satisfaction, and as a result it influenced relationships with the supervisor, coworker, and organization (Mobley et al., 1979).

Figure 2.2 Mobley’s turnover model (1977).
Mobley’s model of employee turnover does not include organizational commitment factors. In 1979, Mobley, Griffeth, Meglino, and Hand expanded Mobley’s model by adding additional facets into the model, such as labor market, organizational, and individual factors. The extended model is comprised of the following determinants: (1) organizational factors (job design, reward system, organizational leadership); (2) individual variables (performance, organizational commitment, job autonomy); (3) labor market (job alternative and other opportunities); (4) non-work factors (balancing personal and professional life) (Mobley et al., 1979).

**Muchinsky and Morrow’s (1980) Model of Turnover**

In 1980, Muchinsky and Morrow presented a model of turnover, illustrated in Figure 2.3. The authors see the turnover model as “a dynamic process involving psychosocial, sociological, and economic factors” (p. 286). Muchinsky and Morrow’s (1980) model identified three determinants of employee turnover (i.e., individual factors, work-related factors, and economic variables) and four classes of consequences (i.e., individual, organizational-social, organizational-economic, and societal).
Figure 2.3 Muchinsky and Morrow Model of Turnover (1980)

Individual factors included age, length of services, family size, and vocational interest. Work-related factors included recognition and feedback, job autonomy and responsibility, supervisory characteristics, experienced job satisfaction, organizational commitment, seniority provisions. Economic factors included state of national economy, state of local economy, type of industry, state of industry, secondary labor market, and alternative income. Individual consequences included personal problems and job related stress. Organizational-Social consequences included formalization and integration. Organizational-Economic consequences included re-ordering of job functions, payroll, and fringe benefit costs. Societal consequences included allocative efficiency and voluntarily retirement (Michinsky & Morrow, 1980, p. 269). Muchinsky and Morrow
hypothesized that economic factors are the strongest determinant of employee’s turnover and that economic factors control the degree of predictability of individual and organizational factors. The Muchinsky and Morrow model of turnover described “effect of labor market mechanism on turnover decisions. The model's labor-market insights are a by-product of its grounding in the literature of labor economics” (Steel & Lounsbury, 2009, p. 273).

**Price (2001) Causal Model of Turnover**

In 1977, Price and Mueller presented a comprehensive model of voluntary turnover. Price and Mueller (1977) explained turnover as a voluntary leaving. The initial Casual Model of Turnover included 11 determinants that affect turnover: routinization, opportunity, participation, integration, instrumental communication, pay, promotional opportunities, distributive justice, professionalism, kinship responsibility, and general training. Later authors added job satisfaction and intent to stay. Price (1977) examined the mediation effect of organizational commitment on the relationship between job satisfaction and its antecedents, and turnover intention. Price (1977) pointed out that the developed Causal Turnover Model is “tentative and represents an attempt to constructs a plausible synthesis of what is known about the variables that produce variations in turnover” (p. 549).

Thirty years later, Price (2001) published an extended Causal Model of Turnover, see Figure 2.4. Causal factors were divided into two groups: (1) exogenous variables, which included environmental, individual, and structural variables; and (2) endogenous or intervening variables, which included job satisfaction, organizational commitment,
search behavior, and intent to stay. Environmental variables were represented by opportunity and kinship responsibility. Price (2001) explained opportunity as “the availability of alternative jobs in the environment and type of labor market variable emphasized economics” (p. 601). Kinship responsibility refers to obligation toward relatives/family living in a particular place (Price, 2001, p. 603). Job stress was described by the following variables: autonomy, the role of ambiguity, promotional chances, and distributive justice. Major determinants of turnover were organizational commitment, job satisfaction, search behavior, and intent to stay. Price (2001) defined job satisfaction as a main predictor of organizational commitment. Price (2001) explained that search behavior is “degrees to which employees are looking for other jobs, whereas intent to stay is the extent to which employees plan to continue membership with their employer” (pp. 608-609). Price treated both factors as thinking about quitting (p. 609). His (2001) turnover model can apply to full-time employees who planned to build long-term relationship with organization.
Figure 2.4 Price’s (2001) Causal Model of Turnover (p.602)
The following sections discuss employees’ job satisfaction and various motivational theories. These are explored key determinants of job satisfaction including in depth discussion related to satisfaction with supervisor.

**Work Motivation Theories**

Motivational theories are important lens to view the job satisfaction. Various motivational theories have been developed and validated. There are several motivational theories associated with employee job satisfaction, namely Herzberg’s motivation hygiene theory (1957, 1959, 1966), self-determination theory (Deci & Rayn, 1980), and job design theory or a job characteristics theory (Hackman & Oldman, 1980). Major determinants of job satisfaction were reviewed, namely: satisfaction with pay, satisfaction with promotion, satisfaction with rewards, satisfaction with fringe benefits, satisfaction with coworkers, satisfaction with nature of work, and satisfaction with communication. According to motivational theories, various factors affect an employee’s job satisfaction. In the next sub-section, motivational theories will discussed in relation to employee job satisfaction.

Among reviewed work, motivation theories were: Herzberg’s two-factor theory, self-determination theory, and intrinsic motivation through the design of jobs. In the late 1920s, the Hawthorne study examined employee’s emotions and working behavior, which was one of first to measure the work satisfaction concept (Robbins, 2002). Satisfied employees are more creative, innovative, and positive, and it affects their superior performance; on the other hand, dissatisfied employees have a lower level of commitment that negatively effects individual and organizational performance (Rast &
Tourani, 2012). Locke defined job satisfaction as “an emotional response that results from the employee’s perceived fulfillment of their needs and what they believe the company to have offered” (Rast & Tourani, 2012, p. 92).

The term “motivation” was derived from the Latin, which means “to move” (Steers, Porter, & Bigley, 1996). Young (1961) defined motivation as “… the process of arousing action, sustaining the activity in progress, and regulating the pattern of activity” (p. 24). In his 2008 book, Work Motivation in Organizational Behavior, Pinder mentioned three concepts of work motivation: “hope, vision, and action.” He explained these concept as follows: “Hope as an internal force that stimulates an individual to act … Vision as a direction for the individual’s action … Action itself is what brings the change” (Pinder, 2008, p. 11). He defined work motivation as “a set of energetic forces that originate both within as well as beyond an individual’s being, to initiate work-related behavior, and to determine its form, direction, intensity” (p. 11). He stated that this work motivation definition applies to all kinds of work behavior, and it is a key factor in job performance and human productivity (Pinder, 2008). Work motivation is a key to the competency of organizational leadership. Victor Vroom explained that job performance equals motivation multiplied by ability, where the motivation combines components from several scientific fields such as human resource management, organizational behavior, and industrial and organizational psychology (Latham, 2012).

Deci and Ryan (1985) explained motivation theory as an energy, which is “fundamentally a matter of needs”; and direction, which is “a process and structure of organism that give meaning to internal and external stimuli, thereby directing action
toward the satisfaction of needs” (p. 3). Higgins (1996) described motivation as an internal drive of the individual to satisfy an unsatisfied need. According to Linder, (1998) employee motivation is linked to money, behavior, and attitude. The following three work motivation theories will provide insight on intrinsic and extrinsic motivational factors, and how it affects an individual’s job satisfaction.

**Herzberg’s two – factor theory.**

In 1957, Herzberg, Mausner, Peterson, and Capwell published a book, *Job Attitude: Review of Research and Opinion,* in which the authors discussed job satisfaction and job attitude as key predictors that impact employees’ job performance. In 1959, Herzberg, Mausner, and Snyderman issued a second book, *The Motivation to Work,* in which they described the study that they conducted on 203 engineers and accountants from Pittsburgh, Pennsylvania. Hertzberg et al. examined factors that were associated with job satisfaction and job dissatisfaction among participants. The instrument’s questions focused on work aspects such as experience, needs, perceptions, and behavior that reflected factors, motives, attitudes, and effects (results) of employees. That study helped the authors identify 14 factors that affect employees’ attitudes toward their job, namely recognition, achievement, possibility of growth, advancement, salary, interpersonal relationship with supervisors and peers, supervisor-technical, responsibility, company policy and administration, work condition, work itself, factors in personal life, status, and job security.

In 1966, Herzberg, Snyderman, and Mausner conducted additional studies on a variety of occupational groups and reported research findings in their book, *Work and the*
Nature of Man. The authors identified specific factors that had affected workers in terms of work satisfaction (positive experience – “high” level) and dissatisfaction (negative experience – “low” level). Herzberg’s two-factor theory is represented in Table 2.1.

Table 2.1 Herzberg’s Employees’ Job Satisfiers and Hygienes

<table>
<thead>
<tr>
<th>Satisfiers</th>
<th>Hygienes</th>
</tr>
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<tbody>
<tr>
<td>Recognition</td>
<td>Working Condition</td>
</tr>
<tr>
<td>Achievement</td>
<td>Company Policies</td>
</tr>
<tr>
<td>Possibility of Growth</td>
<td>Relationship with supervisors</td>
</tr>
<tr>
<td>Advancement</td>
<td>Relationship with peers</td>
</tr>
<tr>
<td>Responsibility</td>
<td>Pay</td>
</tr>
<tr>
<td>Job itself</td>
<td>Security</td>
</tr>
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*Note. Source is Herzsberg et al. (1966).*

Thus, the two-factor theory relates to employee satisfaction factors that refer to true motivators at work and employee dissatisfaction factors or hygienes that tend to demotivate them. Duttweiler (1986) noted that term “hygiene” was used by Herzberg in the medical sense, “the sense that it operates to remove hazards from the environment” (p. 371). Hamner and Organ (1978) emphasized that “hygienes are easy to measure, control, and manipulate compared to the positive motivator factors” (p. 155).

**Self-determination theory (SDT).**

SDT is a macro–theory of human and work motivation that was developed by Edward L. Deci and Richard Ryan over the last forty years. Deci and Ryan (2014) defined SDT as “a macro-theory of personality, development, and well-being in social context that has used motivational concepts to hypothesize, organize, and predict
phenomena across various areas of psychology and across numerous fields, including the domain of motivation in the workplace” (p. 16). Self-determination phenomena include both the individual’s “capacity” and “need,” and sometimes involve controlling ones’ environment or outcomes (Deci & Ryan, 1985).

The “needs-for-competence-and-self-determination” approach is an important key point of this theory (Deci & Ryan, 1985, p. 40). “The needs of competence and self-determination keep people involved in an ongoing cycle of seeking and conquering optimal challenge (Deci & Ryan, 1985, p. 33). The distinction between controlled and autonomous motivation is another central idea of the SDT. Individuals who are satisfied with basic psychological needs and have the experience of choice and volition are referred to as autonomously motivated (e.g., an autonomously motivated person would say “I work in this organization because I like it.”) (Deci & Ryan, 1985, p. 38). In contrast, controlled motivation (or amotivation) can be explained as when a worker is acting because she/he has to engage in the action, it means that individual has a lack of work motivation. However, the intrinsic and extrinsic motivations both refer to the autonomous motivation because both of these approaches are based on the satisfaction of psychological needs (Deci & Ryan, 2014). SDT asserts that:

1) Personal choices based on an individual’s freedom lead to personal empowerment, a higher level of work autonomy, and work interest in a task through one’s engagement, initiation, and responsibility.
2) Independent personality traits such as autonomy, control, and impersonal orientation affect an individual’s perception of self and environment (Latham, 2012).

Many previous SDT studies investigated how individuals satisfy the needs of a social environment (Latham, 2012). Gagne and Deci (2005) explained the relationship between autonomous and/or controlled motivation and performance outcomes. They stated that:

… autonomous motivation has strong associations with effective performance on relatively complex tasks, whereas there is either no difference or a short-term advantage for controlled motivation when mandate tasks are involved … autonomous motivation is associated with greater job satisfaction and well-being” (pp. 346 -347).

Gagne and Deci (2005) proposed the SDT summary model of work motivation, Figure 2.5 below.
Ryan and Deci (2000) mentioned that different reasons give rise to an action that identifies the type of motivation. Intrinsic motivation refers to “doing something because it is inherently interesting or enjoyable” (Ryan & Deci, 2000, p. 55). In other words, doing something for its inherent satisfaction. Intrinsic motivation is defined by Ryan & Deci (2000) as “the doing of an activity for its inherent satisfactions rather than for some separable consequence. When intrinsically motivated, a person is moved to act...
for the fun or challenge entailed rather than because of external prods, pressures, or rewards” (p. 56). The intrinsic motivation approach is “comprised of energy expended, challenge, and incongruity (Porter, 1974, p. 236). At the same time, the job characteristic approach is similar to Herzberg’s Two-Factor Theory and is characterized as “a set of features that should be built into jobs in order that they be satisfying and motivating, although the two approaches differ somewhat with regard to the specific characteristics of work that make it desirable” (Porter, 1974, p. 243).

Hackman and Oldman (1980) started their research asking the question, “How can work be structured so that it is performed effectively and, at the same time, jobholders find the work personally rewarding and satisfying?” (p. 71). Thus, the authors examined the basic work condition that influences job satisfaction and high performance motivation. Hackman and Oldman (1980) explained the properties of motivating jobs through core job characteristics based on critical psychological states. The three critical psychological states include: (1) experienced meaningfulness of the work included skill variety, task identity, and task significance; (2) experienced responsibility for outcomes of the work included job autonomy; and (3) knowledge of the actual results of the work activities included feedback from the job. The Hackman and Oldman (1980) Job Characteristic Model is shown in Figure 2.6.
Summary of work motivation theories

Based on the literature review, there is evidence that work motivation theories directly and indirectly relate to job satisfaction. Moreover the three theories examined interrelate with one another. Porter (2008) mentioned that Herzberg’s Two-Factor Theory was based on motivators that relate to motivation and satisfaction, and hygenies “as causative only of dissatisfaction, failing to mention the reversals in the data that
originally gave rise to the theory” (p. 35). Herzberg et al. (1966) suggested that job training or any educational interventions positively affect employees’ motivation toward their jobs and that hygiene factors need to be improved to help employees be more satisfied with their jobs. Herzberg and his associates established that job satisfaction positively correlates to work performance and negatively correlates with employee turnover (Herzberg et al., 1959, 1966).

Self Determination Theory (SDT) has its roots in Maslow’s higher and lower order needs. However, as Deci and Ryan (2014) indicated, the SDT focuses not on basic needs, but specified psychological needs for competence, autonomy, and relatedness (p. 16). Gagne and Panaccio (2014) mentioned that SDT explains why certain job designs have their effects on employee outcome using the methodology of a Job Characteristic Model. The authors emphasized that SDT provides better understanding for why and how job characteristics attributes interact with organizational structure, organizational technologies and leadership style (Gagne & Panaccio, 2014, p. 177).

Lunenburg (2011) noted that a Job Characteristics Model revealed that “enriching certain elements of jobs alters people’s psychological states in a manner that enhances their work effectiveness” (p. 9). Gagne and Deci (2014) emphasized that “there was a main effect of need satisfaction on job satisfaction” as well as “competence need to job satisfaction” according to SDT (p. 17). Hofer and Busch (2011) found strong relationships between job satisfaction in the workplace and satisfaction of the competence. Kuvaas and Dysvik (2009) discussed SDT and workforce training and development, and they mentioned that “specifying autonomous and controlled forms of
extrinsic motivation … are a key of employee outcome” (p. 219). Motivation in the training context was defined as “the direction, intensity, and persistence of learning-directed behavior” (p. 219). In other words, the authors demonstrated that the opportunity to train at the workplace was relevant and adequate for continued development at the workplace.

The three theories of work motivation discussed above, Herzberg’s Two – Factor Theory, Self-Determination Theory, and Job Characteristics Model, affected each other over time. The Herzberg motivation hygiene theory specified positive and negative job attributes and attitudes that provided a bridge toward the theory of job design or a job characteristics model. Pinder (2008) mentioned that the Hackman and Oldman approach is similar to Herzberg’s methodology regarding a proposed “set of features that should be built into the job in order that they [employees] be satisfied and motivated, although the two approaches differ somewhat with regards to the specific characteristics of work that make it desirable” (p. 209).

Measuring and Key Determinants of Job Satisfaction

This sub-section discusses the history of job satisfaction and measurement of job satisfaction.

Higher job satisfaction impacts employee effectiveness and job performance, and helps organizations retain their employees (Heshizer, 1998). Smith, Kendall, and Hulin (1969) defined job satisfaction as “an effective response of the worker to his job” (p. 272). Satisfaction was viewed as a result of “worker’s experience on the job in relation to his own value, that is, to what he wants or expects from it” (Smith et.al., 1969,
p. 272). Locke (1976) explained “job satisfaction” and “job dissatisfaction” as emotional reactions as a result of an individual’s perception regarding one's fullfillers, job value, and needs. Locke (1976) characterized job satisfaction as enjoyable emotions from individual’s work experiences. Cranny, Smith, and Stone (1992) defined job satisfaction as an employee’s affective reactions to a job based on the comparison of desired outcomes with actual outcomes. Job dissatisfaction is a result of low productivity and psychological frustration (Cranny, Smith, & Stone, 1992). Summarizing, based on the literature review job satisfaction was viewed as a worker’s emotions and experience at work place and his responses to that experience

Howard and Frick (1996) indicated that job satisfaction is a multifaceted construct that includes both intrinsic and extrinsic job indicators. Amabile (1993) proposed the following definition:

Individuals are *intrinsically motivated* when they seek enjoyment, interest, satisfaction of curiosity, self-expression, or personal challenge in their work.

Individuals are *extrinsically motivated* when they engage in the work in order to the obtain something that is apart from the work itself. (p. 186)

Burke (1987) noted that, according to the psychological approach, job satisfaction and job dissatisfaction differ based on an individual’s expectations. Herzberg et al. (1966) mentioned that job satisfaction factors are intrinsic whereas job dissatisfaction factors are extrinsic. For example, Herzberg’s motivation hygiene (Two-Factor) theory, explained employees’ satisfaction factors that refer to true motivators, such as recognition, achievements, possibility of growth, advancement, and the job itself; and hygiene factors
or demotivating factors such as working condition, company policy, relationship with supervisors, relationship with peers, pay, and security (Herzberg, 1957, 1959, 1966). Porter and Steers (1973) mentioned that the level of employee job satisfaction based on his or her expectations related to pay, promotion, or autonomy. Unmet employee expectations affect job dissatisfaction or employees’ decisions to quit the job (Pearson, 1991).

Strong and Harder (2009) used Herzberg’s Two-Factor Theory to identify motivational factors that affect Extension employee retention. Among the motivating factors were “strong and consistent training and staff development programs, mentoring programs, accolades for work well done, having an appealing vocation, a sense of support within the workplace, and overall job satisfaction.” The hygiene factors were “inadequate salary, poor pay to workload ratio, financial opportunities outside Extension, large and abnormal time obligations, issues balancing personal and professional life, and job stress” (Strong & Harder, 2014, p. 2).

Cano and Miller (1992) conducted a gender analysis of job satisfaction among agricultural education teachers. They used Wood’s job satisfaction questionnaire among secondary agricultural education teachers and Brayfield-Rothe’s “Job Satisfaction Index.” They found that the job satisfier dimension included “achievement, advancement, recognition, responsibility, the work itself,” and the job dis-satisfier dimension comprised of “interpersonal relationship, policy and administration, salary, supervision/technical, and working conditions” (Cano & Miller, 1992, p. 43).
Vitell and Davis (1990) investigated the association between job satisfaction and ethics on 61 management information system professionals. The researcher used five of the following dimensions: (1) pay satisfaction, (2) promotion satisfaction, (3) coworker satisfaction, (4) supervisor satisfaction, and (3) work itself satisfaction. The authors found that unethical behavior at the workplace negatively affected job satisfaction. Managers were dissatisfied with supervisors, coworkers, and work itself when they engaged in unethical behavior at the work environment.

Three major surveys used extensively in the literature to measure employee job satisfaction are summarized below: (1) Minnesota Satisfaction Questionnaire, (2) Cornell Studies of Satisfaction: The Job Descriptive Index, and third, (3) Spector’s Job Satisfaction Survey.

The Minnesota Satisfaction Questionnaire was developed by Weiss, Dawis, England, and Lofquist in 1967. This instrument includes 20 dimensions that measure employee satisfaction with job environment, namely ability utilization, achievement, activity, advancement, authority, company policies and practices, compensation, coworkers, creativity, independence, moral values, recognition, responsibility, security, social service, social status, supervision-human relations, supervision–technical, variety, and working condition. (Weiss, Dawis, England, & Lofquist, 1967, pp. 1-2). Reliability coefficient in previous studies was .90 (Carlopio, 1996; Hancer & George, 2003; ).

Cornell Studies of Satisfaction: The Job Descriptive Index. The main assumption of the Cornell study regarding job satisfaction was that a “satisfied worker is the productive worker” (Smith et al, 1969, p. 272). Smith et al. (1969) stated that job
satisfaction and job dissatisfaction may or may not have an effect on employee overt behavior. Measures of employee satisfaction were a good criteria that demonstrated “the success of management policies and practices, such as job enlargement, supervisory training, participative management, group decision making, employee welfare programs, bonus or incentive-payment system” (p. 273). The result allowed the author to predict future turnover among personnel. Thus, the Cornell Job Descriptive Index included five dimensions of job satisfaction: (1) satisfaction with work, (2) satisfaction with pay, (3) satisfaction with the opportunities for promotion, (4) satisfaction with supervision, and (5) satisfaction with coworkers (Smith et.al, 1996, pp. 274-277). Previous studies reported that Cronbach alpha coefficient were above .70 (Stanton, Sinar, Balzer, Julian, Thoresen, Aziz, … & Smith, P. C. (2002).

Spector’s Job Satisfaction Survey. Spector (1985) measured job satisfaction by a Job Satisfaction Survey that included the nine dimensions: (1) satisfaction with pay, (2) satisfaction with promotion, (3) satisfaction with supervision, (4) satisfaction with fringe benefits, (5) satisfaction with contingent rewards, (6) satisfaction with operating procedures, (7) satisfaction with coworkers, (8) satisfaction with nature of work, and (9) satisfaction with communication. The reliability coefficient was .91 (Spector, 1985). Below is key determinants of job satisfaction will be discussed.

The key determinants of job satisfaction were provided above and three major surveys that were extensively used in the literature were discussed.
Satisfaction with Pay

Many studies found that pay satisfaction influences an employee’s job satisfaction (Luthans, Avolio, Avey, & Norman, 2007; Motowidlo, 1983; Robbins, 2004). Motowidlo (1983) investigated the effects of pay expectation and pay satisfaction on employee’s withdrawal cognition and turnover. He found that satisfaction with pay and withdrawal cognition significantly correlates with employee’s actual turnover. Moreover, satisfaction with pay mediates the effect between employee’s turnover intention and actual turnover (p. 484).

Pay equity and pay satisfaction are considered important indicators of employee’s work satisfaction or dissatisfaction (Heneman and Schwab, 1985; Porter and Steel, 1973). Heneman and Schwab indicated that pay satisfaction is one of the important predictors of the job satisfaction models; however pay satisfaction was treated as a unidimensional construct. The Heneman and Schwab (1985) conducted a study on white-collar employees (N=355) and nurses (N=1980) where they suggested that pay satisfaction is multi-dimensional construct. Using exploratory and confirmatory factor analysis techniques authors examined the construct validity. Heneman & Schwab (1985) Pay Satisfaction Questionnaire included five dimensions of satisfaction with pay, namely: satisfaction with level of pay, satisfaction with benefits, satisfaction with raises, satisfaction with structure, and satisfaction with administration. The authors suggest that employees are “differentiated between several components of organizational compensational system” (p. 138).
Weiner (1980) identified determinants of pay satisfaction using Lawler’s and Dyer and Theriault’s models. Lawler (1971) developed five dimensions model of job satisfaction, which includes: (1) perceived personal job inputs, (2) perceived job demands, (3) perceived non-monetary outcomes, (4) perceived inputs and outcomes of referent other and (5) wage history (Weiner, 1980, p. 742). Weiner (1980) mentioned that an employee’s dissatisfaction with pay is a reason for changing a job. Moreover, job dissatisfaction influences an employee’s work performance, job dissatisfaction, and turnover (Weiner, 1980). Dyer and Theriault’s model was incorporated in Weiner’s study of examining determinants of pay satisfaction. Dyer & Theriault’s model included the following factors: satisfaction with job structure, satisfaction with amount of increase, satisfaction with increase administration, satisfaction with performance appraisal system, accuracy of performance assessment. Furthermore, administrative variables “explained a variance of higher satisfaction with pay” (Weiner, 1980, p. 750).

Carraher (1991) developed an 18-item instrument of pay satisfaction and examined his new instrument’s constructs using principal component analysis and confirmatory factor analysis. His instruments included four dimensions related with satisfaction: (1) pay level, (2) benefits, (3) raises, (4) structure or administration (p. 887). He used a five-point Likert scale from dissatisfied (1) to very satisfied (5). The analysis was conducted on nurses (N=1980) employed in the U.S. In 2012, Rast & Tourani examined job satisfaction among employees in the airline industry. They found that pay factor is important for employees. Half of the employees were not satisfied with their pay and the salary was not adequate for their daily life expenses. Authors concluded that
dissatisfaction occurs when workers feel that their salary is low, compared to the amount of work performed for particular period of time.

**Satisfaction with Promotion**

Several studies found that promotion and rewards have direct and positive relationships with job satisfaction (Gilliland, 1994; Lawler, 1973; Mowday, Porter & Steers, 1982; Quarles, 1994). Promotion and rewards systems are used to assess work performance and reward workers. Quarles (1994) mentioned that “promotion and rewards criteria are both under direct control of an organization and subject to the organization’s policies” and have significant effects on job satisfaction, commitment, and turnover (p. 176). Lawler (1973) wrote that promotion was one of the major variables that affects employees’ work dissatisfaction. Promotion policies reflect employees’ work attitude toward work satisfaction and organizational commitment (Mowday, Porter, & Steers, 1982).

According to Herzberg’s motivation theory, promotion and rewards systems are part of the extrinsic factors. In 2002, De Souza conducted a research on 183 individuals and examined how promotion influences job satisfaction. The author found a significant positive relationship between job satisfaction and promotion. Gilliland (1994) described justice theory through distributive, procedural, and interactional justice that reflects fairness related to rewards, where promotion was listed as one of elements of the organizational rewards system. In 2000, Lazear investigated the relationship between performance, pay and productivity. He indicated that higher promotion provides higher compensation. Malik, Danish, and Munir (2012) examined the impact of pay and
promotion on job satisfaction. They found that “pay and promotion explains the 11.2% variance in job satisfaction” (p. 7).

**Satisfaction with Reward**

O’Driscoll and Randall (1999) suggested that job rewards have a powerful effect on employees’ behavior and attitude toward the organization. Kalleberg and Loscocco (1983) mentioned that “work values and job rewards are systematically related to workers' positions in both work career and family life stages” (p. 79). That is why the authors concluded that job satisfaction is an important predictor of the individual’s overall quality of life. In 1977, Kalleberg indicated that, to better understand “the variation in workers' job satisfactions, it is necessary to consider not only the values that individuals have toward work but the types of rewards that are available as well.” (p. 141). Kalleberg and Loscocco (1983) indicated that rewards should increase with age because of several reasons: (1) “age differences reflect life stage differences,” (2) “age may reflect career phase” which includes experience and seniority, (3) “job mobility” which means that workers with work experience have better financial and occupational resources than an individual who just started his career (p. 79). Kalleberg (1977) emphasized that workers’ longer time in the labor force, education level, and job performance highly correlated to job rewards.

Rewards have a powerful effect on an employee’s attitude toward their work (Lincoln & Kalleberg, 1990). Kalleberg (1977) mentioned that rewards do not represent “objective properties of job” (p. 131). He found that rewards and job satisfaction have a positive and strong correlation. O’Driscoll and Randall (1999) conducted research on 350
dairy workers from New Zealand and Ireland to investigate the role of satisfaction with rewards regarding job involvement and organizational commitment. The authors examined reward satisfaction through intrinsic and extrinsic rewards on a seven-point scale. Intrinsic rewards were reflected through (1) variety of work performed, (2) challenge in the job, (3) opportunities to utilize workers’ ability and skills, and (4) work autonomy. The Cronbach alpha coefficient for the intrinsic rewards was .86. Extrinsic rewards were measured through seven items such as: (1) pay and fringe benefits (financial rewards), (2) advancement opportunity (promotion), (3) job security, (4) relations with coworkers, (5) physical working conditions, (6) social support, and (7) praise for job performance. The Cronbach alpha coefficient for the extrinsic rewards was .74 (p. 203).

Intrinsic reward satisfaction was associated with both greater job involvement and affective commitment, while extrinsic rewards satisfaction was a significant predictor of affective commitment O’Driscoll & Randall (1999). In 2006, Australian scientists Scott-Ladd, Travaglione, and Marshall studied the employees of three industries and hypothesized that participation in decision making will positively affect employees’ perceptions of rewards. They found that employees appreciated the opportunity to participate in the decision-making process and to receive rewards. Employees were satisfied with rewards and it positively affected on their affective commitment, however some participants indicated that “rewards were not perceived as equitable given the work effort extended” (p. 409).

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Satisfaction with Fringe Benefits

Fringe benefits are one of the key components of worker compensation and job satisfaction (Artz, 2010; Mitchell, 1982). In 1982, Mitchell defined a fringe benefit as “a form of nonwage compensation provided by a worker's firm” … “fringe benefits include medical and disability insurance, pension programs, life insurance, and similar benefits.” (p. 286). Mitchell (1982) investigated the role of fringe benefits in determining worker’s turnover intention and quitting behavior. He hypothesized the “difference between the current compensation package and that available from an alternative job” will affect a worker’s turnover decision. Mitchell (1982) used the Quality of Employment Survey as an instrument that was administrated in 1973 and 1977, with 782 individuals completing the survey. The author concluded: higher fringe benefits associates with lower job mobility; higher wages reduce a workers’ turnover intention; and turnover patterns differ by gender, for example, males are more responsive to the fringe benefits level.

Artz (2010) conducted research on five waves of the National Longitudinal Survey of Youth from 1996 to 2004 to examine the relationship between worker job satisfaction and employer fringe benefits. The author found that fringe benefits are important determinants of job satisfaction and positively influence job satisfaction in several ways: (1) Fringe benefits are an important component of the compensation package and increase job satisfaction; (2) There is less cost to have fringe benefits through an employer then through market; (3) A spouse’s employer’s fringe benefits are important, (4) A “job -lock” situation may decrease satisfaction with job; and (5) specific fringe benefits are important determinants of satisfaction with work (Artz, 2010).
Satisfaction with Co-workers

Lower satisfaction with coworkers creates a less than enjoyable workplace, weaker emotional connections, and the intention to leave the organization (Cotton & Tuttle, 1986; Ducharme & Martin, 2000; Griffen et al., 2000; Hansen, Hogh, Persson, Karlson, Garde, & Ørbæk, 2006; McCormack, Casimir, Djurkovic, & Yang; 2006; Mitchell, Holtom, Lee, Sablynski, & Erez, 2001). Cook and Wall (1980) wrote that “trust between individuals and groups is a highly important ingredient in the long-term stability of the organization and the well-being of its members” (p. 339). McCormack, Casimir, Djurkovic, and Yang (2006) suggested that interpersonal relationships are one of the important factors in the educational sector among colleagues because it affects an individual’s performance evaluation and promotion opportunities. According to Herzberg’s two-factor theory, relationships with coworkers are an extrinsic dimension and refers to how helpful coworkers are with each other, personal interest to each other, and friendly attitude. Kalleberg (1977) explains employees’ satisfaction of social needs through work-related activities.

McCormack, Casimir, Djurkovic, and Yang (2006) conducted research on 142 full-time school teachers in China to investigate the effects of workplace bullying and satisfaction with coworkers on affective commitment. The authors found that workplace bullying has a negative correlation with commitment, and satisfaction with coworkers have a positive correlation with affective commitment. Hansen, Hogh, Persson, Karlson, Garde, & Ørbæk (2006) noted that bullying at work has a psychological and physiological effect on employee. Hoel and Einarsen (1999) defined bullying at the
workplace as ‘socially excluding the target’ or violent and non-violent behaviors (offending and harassing). Bullying at work positively correlates to employee absenteeism (Hoel & Einarsen, 2003) and turnover intention (Djurkovic et al., 2004).

Liao, Joshi, & Chuang (2004) mentioned that satisfaction with coworkers at workplace influences worker’s cognitive evaluation and affective response toward other people at work, affecting individual and organizational performance. Ducharme and Martin (2000) emphasized that lower worker satisfaction relates to employees’ perception and feelings of annoyance and tension towards coworkers. Lower job satisfaction is associated with peer support and minimum social integration at the workplace (Hitlan, Cliffton, & DeSoto, 2006).

Lack of interpersonal communication with coworkers relates to employees’ turnover intention (Mitchell, Holtom, Lee, Sablynski, & Erez, 2001). A negative correlation was found between employees’ turnover intention and satisfaction with coworkers (Cotton & Tuttle, 1986; Griffen et al., 2000). In 2007, Golden conducted research on 240 telemarketing employees, examining coworker satisfaction and turnover intention. The author found that extensive face-to-face communication with coworkers positively impacts satisfaction with coworkers. Moreover, additional work and frustration negatively affects satisfaction with coworkers. Greater work autonomy positively relates to work accomplishment and has a positive impact on satisfaction with coworkers (Golden, 2007).
Satisfaction with Nature of Work

Quinn and Shepard (1974) wrote that “People differ a lot in terms of what things are important to them” (p. 79). Kalleberg (1977) discussed work values influence on employees’ job satisfaction. He indicated that work may have a variety of meanings for different people and it is important to assess work value through specific job characteristics. According to Hackman and Oldman’s job characteristic model, an intrinsic dimension may refer to job characteristics related to task variety, task autonomy, and task significance. Kalleberg (1977) wrote that “in order to understand the variation in workers’ job satisfaction, it is necessary to consider not only the values that individuals have toward work, but the types of rewards that are available as well” (p. 130).

Saari and Judge (2004) conducted research on employee’s attitude and job satisfaction, exploring influences in the work situation. They wrote “situational influence on job satisfaction is the nature of the work itself – often called ‘intrinsic job characteristics’” (p. 397). The “nature of the work” dimension is part of many job satisfaction instruments (Judge & Church, 2000). Saari and Judge (2004) noted that employees ranked ‘interesting job’ as the most important employee attitude towards a job. Satisfaction with nature of the work, itself, “is one important element of general job satisfaction that should be measured through job variety, job autonomy, and job scope” (Saari & Judge, 2004, p. 398)

Satisfaction with Communication

In 1980s, many researchers focused on how communication contributes to organizational performance and employee’s job satisfaction (Hellweg & Phillips, 1981;

Muchinsky (1977) found a significant positive relationship between superior-subordinate relationships and subordinate job satisfaction. Downs, Hazen, Quiggins, & Medley (1973) developed an eight-faced construct of satisfaction with communication: (1) communication climate, (2) immediate supervisor communication, (3) media quality, (4) horizontal communication, (5) organizational integration, (6) personal feedback, (7) organizational perspective, and (8) subordinate communication.

In 1986, Pincus conducted research on 327 professional nurses at a large hospital on the East Coast of the U.S., and examined the relationship between communication satisfaction, job satisfaction, and job performance. The author developed a communication satisfaction–outcomes research model that included three dimensions: (1) relational dimensions (subordinate communication, horizontal communication, top management communication), (2) informational /relational dimensions (personal feedback, communication climate, supervisor communication), and (3) informational dimensions (media quality, organizational integration, organizational perspective). Pincus (1986) hypothesized that the overall communication satisfaction has a strong positive correlation with job satisfaction and job performance. First, he found the communication-job satisfaction relationship was stronger than the communication-job performance link, and secondly, there was a positive relationship between communication satisfaction and
job performance. Some of the communication satisfaction items could explain a small portion of the variance in job performance. The following variables were the major predictors of communication satisfaction and job performance: supervisor communication, communication climate, and personal feedback. Moreover, satisfaction with immediate supervisor communication had a positive relationship with job satisfaction (Pincus, 1986)

Satisfaction with communication is associated with communication values in an organization, employee’s attitude and behavior, communication style, and team structure (Mueller & Lee, 2002). Mueller and Lee (2002) summarized “communication satisfaction is a multidimensional construct within interpersonal, group, and organizational contexts” (p. 223). Moreover, the authors reported a “communication satisfaction link with affective perception of communication experience at multi-levels … superior-subordinate system is an important message environment for larger group … however, social desirability bias in the respondents’ response exists” (p. 236).

Roberts and O’Reilly (1974) developed an instrument to measure organizational communication that included 10 multi-item indexes and six single questions. The 10 indexes included: trust, influence, mobility, desire for interaction, directionality–upward, directionality-downward, directionality-lateral, accuracy, summarization, and gatekeeping. The Cronbach alpha coefficient varied from .64 to .92 The authors concluded that “there is a strong relationship between the degree to which organizational members perceive that the information transmitted at work is accurate and their
performance, it should be advantageous for organizations to devote more time to correcting problems of accuracy” (p. 326).

**Satisfaction with Supervisor**

Previous studies found that employee’s satisfaction with supervisor relates to employee’s satisfaction with work and his turnover intention (Adebayo and Ogunsina, 2011; DeConinck and Stilwell, 2004; Hampton, Dubinsky, & Skinner, 1986; Katz, 1978; Scarpello and Vandenberg, 1987; Wheeless, Wheeless, & Howard, 1984). In 2011, Adebayo and Ogunsina investigated supervisory behavior, job satisfaction, work stress, and turnover intention. The authors mentioned that the nature of supervision is an important factor that influences an individual’s satisfaction with work. DeConinck and Stilwell (2004) studied supervisor satisfaction in a model of turnover and found that satisfaction with supervisor has a direct effect on worker withdrawal cognition. Katz (1978) emphasized the importance of the supervisor role in an employee’s work experience. There are several factors related to satisfaction with supervisor — such as informal and formal feedback, job security, degree of ambiguity, work conflicts — that affect the work environment and employees’ job satisfaction. Satisfaction with a supervisor influences employees’ decisions to leave the organization (Hampton, Dubinsky, & Skinner, 1986).

Karatepe and Kilic (2007) emphasized that satisfaction with supervisor support has a negative impact on employees’ work-family conflict but positively associates with employees’ job satisfaction (p. 248). Vitell and Davis (1990) mentioned that a strong supervisor’s ethic positively associates with satisfaction with the supervisor and work.
McCormack, Casimir, Djurkovic, and Yang (2006) indicated that satisfaction with supervisor is an important predictor of affective commitment and job satisfaction. Tan and Tan (2000) examined trust in supervisor and trust in organization and found a strong, significant correlation between both variables. Trust in supervisor increases employees’ innovative behavior and satisfaction with supervisor. DeConinck and Stillwell (2004) conducted a turnover study and examined the impact of pay satisfaction and supervisory satisfaction in employee’s turnover intention. The authors suggested that “employees may still have lower organizational commitment because of dissatisfaction with the supervisor, even though the level of pay or the fairness in which it is distributed (distributive justice) is considered acceptable” (p. 230). DeConinck & Stilwell (2004) also concluded “an employee may be satisfied with pay but dissatisfied with the supervisor. The employee may still have lower organizational commitment because of dissatisfaction with the supervisor, even though the level of pay or the fairness in which it is distributed (distributive justice) is considered acceptable” (p. 230). Wheeless, Wheeless, and Howard (1983) conducted research on 158 classified non-professional employees in three administrative units of an Eastern university and investigated the relationship between job satisfaction and employee’s satisfaction with communication with their supervisor. The results of their study suggested that satisfaction with supervisor communication is highly correlated with job satisfaction.

The supervisor's receptiveness to information, ideas, and problems of the employee provides an empathic sense of caring and concern, important factors in the human-relations approach to understanding job satisfaction.
Thus, being satisfied with communicating with supervisor and perceiving a supervisor as receptive to advice and information apparently contribute to job satisfaction. (p. 147)

In 1996, Babin and Boles examined how supervisory support can reduce employee stress and increase job satisfaction, using 261 food-service industry employees. The authors hypothesized that supervisory support positively relates to job satisfaction. A strong and positive correlation was found between supervisory support and job satisfaction, and reduced work stress increased job satisfaction. DeConinck and Stilwell (2004) suggested that the supervisor acts as a mediator between employees’ procedural justice and their organizational commitment, and is important in assisting management in understanding why employees possess higher or lower organizational commitment. Participative component of supervisor’s communication and management style positively associates with higher satisfaction with supervisor then non-participative (Richmond, McCroskey, Davis, & Koontz, 1980; Wheeless, Wheeless, & Howard, 1984).

In 1987, Scarpello and Vandenberg developed The Satisfaction with My Supervisor Scale (SWMSS) specifically to “assessing subordinate satisfaction with supervision”, rather than work environment, with 18 items p.462. The SWMSS represented supervisory effectiveness in obtaining subordinate satisfaction and job performance through three interrelated skills namely, (1) technical; (2) human relations; and (3) administrative. Responses to each items were measured on a 1-5 rating Likert scale with the following anchors labeled 1 = very dissatisfied, 2 = dissatisfied, 3 = neither satisfied nor dissatisfied, 4 = satisfied, and 5 = very satisfied. This instrument was used
on 2,101 employees of seven production plants of a multinational U.S. based corporation. The internal consistency was measured by Cronbach alpha and was ranged from .95 to .96 across all seven plants.

In 2005, Jernigan and Beggs, investigated the relationship between satisfaction with one’s supervisor and organizational commitment among 252 non-managerial employees working in different companies in a large southern city. The Satisfaction with My Supervisor Scale was used to measure the employees’ satisfaction with their managers. Authors found that satisfaction with supervisor is a key factor that associates with one’s organizational commitment. Authors identified five important supervisor’s behavior toward subordinates namely, (1) supervisor’s technical competence, (2) showing concern for employees’ career progress, (3) how the supervisor reacts to mistakes; (4) backing up employees with other managers; (5) consistency of the supervisory behaviors toward all subordinates. Jernigan & Beggs (2005) found a strong positive relationship between satisfaction with supervisor and affective commitment. Authors wrote “moral commitment is a reflection of a positive perception by the subordinate of his or her relationship with the organization. Moral commitment indicates a relatively high degree of involvement and acceptance of the goals and objectives of the organization. Supervisor behaviors and actions that “reinforce such attitudes and feelings by subordinates should support a sense of moral commitment by subordinates” (Jernigan & Beggs, 2005, p. 2186).

Summarizing, supportive work environment decreases employee’ turnover intention Michael (2011). Supportive supervisor positively relates to reciprocate
employee behaviors toward work (Michael, 2011). The participative component of a supervisor’s communication and management style is positively associated with higher satisfaction with supervisor than non-participative (Richmond, McCroskey, Davis, & Koontz, 1980; Wheeless, Wheeless, & Howard, 1984).

**Organizational Commitment**

Previous studies have shown organizational commitment is an important predictor of employee turnover intention and an actual turnover (Ferris & Aranya, 1983; Lumley, Tladinyane & Ferreira, 2011; Meyer & Allen, 1991; Mowday, Porter, & Steers, 1982; Stumpf & Hartman, 1984; Weiner and Vardi, 1980). Organizational commitment is associated with employee turnover intention and actual turnover, thus employees who are experiencing strong organizational commitment are less likely to have the intention to leave the organization (Lumley, Tladinyane & Ferreira, 2011). Across numerous studies, organizational commitment and job satisfaction had a significant negative correlation with turnover and turnover intention (Arnold and Feldman, 1982; Hollenbeck and Williams, 1986; Lumley, Tladinyane & Ferreira, 2011; Meyer & Allen, 1991; Mowday, Porter, & Steers, 1982), however had a significant positive relationship with one another (Bluedorn, 1982; Meyer & Allen, 1991; Mowday, Porter, & Steers, 1982).

Organizational employee commitment is a reliable predictor of employee behavior (Mowday, Porter, and Steers, 1982). Sheldon (1971) defined organizational commitment as an attitude or an orientation toward the organization which links or attaches the identity of the person to the organization (p. 143). Salancik and Pfeffer (1977) emphasized that there are three characteristics (visibility, irrevocability, and
volitionality) of human behavior that are associated with how individuals act and commit.

“The power of commitment in shaping attitudes stems from the fact that individuals adjust their attitudes to fit the situations to which they are committed” (Salancik & Pfeffer, 1977, p. 70). In 1970, Porter and Smith defined organizational commitment as “an individual’s identification with involvement in a particular organization” … based on … “(1) a strong belief in and acceptance of the organization’s goals and values; (2) a willingness to exert considerable effort on behalf of the organization; and (3) a strong desire to maintain membership in the organization” (p. 27). Mowday, Porter, and Steers (1982) viewed commitment from several perspectives: (1) as an attitude of attachment to the particular organization, (2) commitment attitude-behavior, and (3) committing behavior-attitude. The last two approaches reflect an influence of commitment attitude on behavior and/or an influence committing behavior on attitude (p. 47).

From the attitude perspective, Mowday, Porter, and Steers (1982) viewed commitment as different from the job satisfaction concept. The authors explained commitment as a more global construct that reflects a broad affective response, while job satisfaction reflects just some aspects of the job environment. Organizational commitment as a global construct was supported by Morrow (1993). Mowday, Porter, and Steers, (1982) noted that employees’ organizational commitment takes a long period to be identified by an individual. They found five dimensions that are associated with organizational commitment such as: (1) affective organizational commitment, (2) job involvement, (3) work ethic endorsement, (4) career commitment, and (5) continuance organizational commitment.
Meyer & Allen (1991) identified three forms of organizational commitment, namely (1) affective commitment, which is associated with employee’s attachment to, identification with, and involvement in the organization; (2) continuous commitment, which is associated with an employee’s level of recognition of the expense of turnover; and (3) normative commitment, associated with employees’ perceptions and feelings in regard to staying with the organization. Meyer, Irving, and Allen (1998) noted that the motives for remaining with the organization differ for each employee. These motives are related to an individual’s needs, desires, and obligations and affect the employee’s job-related behavior.

Job embeddedness theory was another theory that focuses on the reasons why employees want to stay with the organization, do not have intentions to leave the job, and what they would have to sacrifice if they have to leave the organization. According to the American Heritage Dictionary, the word “embedded” is defined as “to fix firmly in a surrounding mass” which is synonymous with rooted and implanted. Mitchell, Holtom, Lee, Sablynski, and Erez (2001) explained job embeddedness as a fit, link, and sacrifice between an employee, their community, and their organization, see Table 2.2.

Table 2.2 Components of Job Embeddedness

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Organization</th>
<th>Community</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fit</td>
<td>Fit-Organization</td>
<td>Fit-Community</td>
</tr>
<tr>
<td>Links</td>
<td>Link-Organization</td>
<td>Links - Community</td>
</tr>
<tr>
<td>Sacrifice</td>
<td>Sacrifice-Organization</td>
<td>Sacrifice Community</td>
</tr>
</tbody>
</table>

Source: Mitchell et al. (2001)
“Fit” is associated with an employee’s career goals, job skills, knowledge, and abilities. Organizational fit is measured, for example, by following the statements “I fit with the company’s culture,” and “I feel good about my professional growth and development.” “Link” is associated with the formal and informal relationships and influences between an individual and an organization. Organizational links are measured by statements such as: “How many coworkers do you interact with regularly?”; “How many teams you are on?”; “How long have you been at your present position?”

“Sacrifice” is associated with a situation where an employee is breaking a link with the organization. Organizational sacrifice is measured by the following statements: “I feel that people at work respect me a great deal,” “I am well compensated by my level of performance,” “I have a lot of freedom on this job to decide how to pursue my goal” (Mitchell et al., 2001).

Van Dyk, Coetzee, and Tebele (2013) studied the organizational commitment and job embeddedness of 206 employees of an IT service company. The authors suggested that organizational commitment is significantly associated with perceived job embeddedness. Moreover, they recommended that “organizational commitment concepts cannot be studied independently of work-related attitudes such as job embeddedness and job satisfaction” (p. 64).

Job involvement was other important factor related to employee’s work motivation and commitment. Brown (1996) explained job involvement as when employees are (1) experiencing job motivation and job challenges; (2) committed to work, organization, and do not have the intention to leave the job; (3) engaging with
coworkers and receiving feedback regarding their work and performance. Aziz and Zickar (2006) associated the terms “job involvement” and “organizational commitment” with workaholic syndrome which includes factors such as (1) excessive work involvement, (2) a high drive to work (intrinsic motivation), and (3) lack of work enjoyment. Gorn and Kanungo (1980) found a strong relationship between job involvement and employee performance. Latham (2012) emphasized that motivation and job satisfaction are characterized by short-term implications for human behavior, while organizational commitment is associated with an employee’s long-term development process. Pinder (2008) concluded that the employee’s level of job involvement is explained by the interaction between an individual’s values and needs, job features, and settings.

Cooper-Hakim and Viswesvaran (2005) found a positive correlation between organizational commitment and job performance. High job performance enhances employees’ organizational commitment through job satisfaction (Latham, 2012). “Specific high goals do indeed lead to high performance. High performance on enriched tasks often leads to high rewards which, in turn, promotes satisfaction, which subsequently encourages commitment to the organization” (Latham, 2012, p. 96). In 1990, Locke and Latham proposed a high-performance model that shows a causal relationship between job satisfaction, high performance, and organizational commitment; in other words, it shows how to increase an individual’s performance, see Figure 2.7. For example, high performance must be internally or externally rewarded through pay, recognition, feelings of accomplishments, and others (Locke & Latham, 2012, p. 264).
Hall, Schneider, and Nygren (1970) described organizational commitment as a “process by which the goal of the organization and those of the individual become increasingly integrated or congruent” (p. 176). In 1969, Brown indicated that organizational commitment is associated with the notion of membership; current position of the individuals; predictive potential provides certain aspects of performance; motivation to work; spontaneous contribution; and other related outcomes, and differential relevance of motivational factors (p. 347). Buchanan (1974) wrote that organizational commitment is an affective attachment to individual’s role in relation to goals and values, and to the organization for its own sake, apart from its purely instrumental worth (p. 533).

Job satisfaction was identified as a key determinant of organizational commitment (Bateman & Strasser, 1984; Curry, Wakefield, Price, & Mueller, 1986). Farkas and Tetrick (1989) identified reciprocal effects between affective commitment and job satisfaction.
Previous studies found a significant correlation between job satisfaction and organizational commitment (Mathieu & Zajac, 1990; Mathieu & Hamel, 1989) and satisfaction with rewards and affective organizational commitment (O’Driscoll & Randall, 1999). Mowday, Porter, and Steers (1982) suggested grouping key factors that influence organizational commitment into three categories: (1) personal characteristics, (2) job-or-role related characteristics, and (3) work experience (p.29). Personal
characteristics include the following variables “age, tenure, educational level, gender, race, and various personality factors” (p. 30). Job-or-role related characteristics included “job scope or challenge, role conflict, and role ambiguity” variables (pp. 31-32). Work experience variables that are associated with organizational commitment include: (1) organizational dependability, (2) personal importance to the organization, (3) fulfilled expectations in the work place, (4) positive attitude toward the organization, (5) perceived pay equity and group norms regarding hard work, (6) leadership style, and (7) social involvement in the organization (Mowday, Porter, & Steers, 1982, pp. 34-35)

Factors Influence an Individual’s Level of Organizational Commitment

Mowday, Porter, and Steers (1982) developed a conceptual model of the commitment process which includes three stages: (1) anticipation stage or pre-entry and job search influences commitment; (2) initiation, or the development of commitment during the first few months of employment; (3) entrenchment or the continuing development of commitment through the mid- and late-career stage (p. 46). In the anticipation stage of employment, major factors of initial commitment to the organization are summarized as the following, see Figure 2.8.

In the initiation stage, Mowday, Porter, and Steers (1982) categorized early employment influences on employees’ organizational commitment into three major groups: personal, organizational, and non-organizational, see Figure 2.9 (p. 55).
In the employees’ later career stages, Mowday, Porter, and Steers (1982) identified one of the key predictors of organizational commitment as tenure in the organization. They found that “higher tenure employees hold more desirable positions than lower-tenure employees”… and that increasing investments in the form of time and energy may make it increasingly difficult for employees to leave their job” and “increasing length of service also brings increasing social involvement in the organization and community” (pp. 65-66). An employee’s commitment to the
organization in his/her entrenchment stage are summarized in Figure 2.10.

Figure 2.9 Major Determinants of Commitment During Early Employment (Mowday, Porter, and Steers, 1982, p.56)

Figure 2.10 Major Influences of Continuing Development or Organizational Commitment During the Later Career Stage (Mowday, Porter, and Steers, 1982, p. 65)
In a few studies, organizational commitment was viewed in terms of attachment, engagement, and identification constructs (Pinder, 2008). Ashforth and Mael (1998) indicated that attachment and embeddedness is associated with voluntary turnover. Van Knippenberg and Sleebos (2006) see identification as a sense of oneness between a person and an organization, while commitment reflects the relationship between the individual and the organization. Dreher (1982) indicated that reward systems are associated with employees’ job performance and commitment. Steers (1977) found that work-related experience has a strong positive impact on employees’ organizational commitment.

In 1979, Mowday, Steers, & Porter developed an instrument – the Organizational Commitment Questionnaire (OCQ) that included fifteen items. The questionnaire was developed based on the authors’ definitions of organizational commitment discussed above. Responses were measured by seven-point Likert scale: strongly disagree, moderately disagree, slightly disagree, neither agree nor disagree, slightly agree, moderately agree, strongly agree. To reduce response bias, the authors phrased a few phases negatively and used reversed scores. Some of the Organizational Commitment Questionnaire items were: “I feel very little loyalty to this organization” (R); “This organization really inspires the very best in me in the way of the job performance”; “Often, I find it difficult to agree with this organization’s policies on important matters relating to its employees” (R); “I find that my value and the organization’s values are very similar” (Mowday, Porter, and Steers, 1982, p. 221). Reliability coefficient for the organizational commitment instrument has varied from .82 to.93
Mediating Effects of Organizational Commitment and Satisfaction with Supervisor in Previous Research

Traditionally, researchers test the direct relationship between X and Y first and, afterwards determine if there is mediation effect of the intervening variable on the relationship between X and Y. The mediating effect of organizational commitment has been studied since the 1980s. Rucker, Preacher, Tormala, and Petty (2011) suggested testing whether the intervening variable has an indirect or mediation effect on the relationship between the independent (X) and dependent (Y) variable. The authors used Baron and Kenny’s (1986) causal steps approach with precaution, stating that results can lead to misleading conclusion in case if the intervening variable score very close to zero. Data analysis section in Chapter 3 discusses more in depth of mediation effect of intervening variable in relationship between independent and dependent variable.

Previous studies reported that organizational commitment has an indirect effect on employee’s withdrawal behavior (DeCotiis & Summers, 1987; Mueller & Price, 1990; Williams & Hazer, 1986). Lum, Kervine, Clark, Reid, and Sirola (1994) investigated turnover intent through job satisfaction, pay satisfaction, and organizational commitment among 361 registered nurses from select hospitals. The authors hypothesized that organizational commitment mediates the effect on the relationship between all job satisfaction variables, except satisfaction with pay and turnover intent. The authors reported that organizational commitment, job satisfaction, and satisfaction with pay have a combined effect on employee turnover intention. They suggested that job satisfaction does not influence turnover intention directly; however, they emphasized the mediating
effect of organizational commitment on the relationship between job satisfaction and turnover intention. The authors indicated that in the literature many studies ignored the indirect effect of organizational commitment on turnover intention because the tested models did not fit the data well. Williams and Hazer (1986) used structural equation methods to review the causal relationship between organizational commitment and job satisfaction. The authors found that personal and organizational characteristics do not directly influence turnover intent, however, they directly influence job satisfaction and affect turnover intention indirectly. The authors suggested reviewing the causal relationship between organizational commitment, job satisfaction, and turnover intent.

In 2000, Glugston investigated the mediating effects of organizational commitment (affective, continuance, and normative) on the relationship between satisfaction with job and turnover intention on 470 employees of government agencies. He utilized the structural equation modeling approach, using the single indicator latent variable analysis to assess the relationships between the different constructs of each of the four models. This technique has been used in previous studies (Settoon, Bennett & Liden, 1996). The author reported the chi-squared statistic, the goodness and adjusted goodness-of-fit indices, the root mean square error of approximation, and the normed-fit index after testing several models that fit the data best. The Glugston (2000) study supported Mueller and Price (1990) who reported that both organizational commitment and job satisfaction are related to turnover and turnover intention; however, organizational commitment had a stronger negative correlation with turnover.
There were no studies related to the mediation effect of satisfaction with supervisor on relationship between job satisfaction and turnover intention. This current study attempted to measure the contribution of organizational commitment and satisfaction with supervisor to on indirect effect on relationship between job satisfaction and turnover intention.

**Demographic Variables in Previous Studies**

According to Vandenberghe and Ok (2013), demographics are the characteristics used to distinguish groups of a population. Edgar and Geare (2004) mentioned that demographics represent the following factors: age, gender, ethnicity, marital and family status occupation, salary levels, and seniority. The relationship between demographic variables, organizational commitment, job satisfaction, and turnover intention were found to be inconsistent (Jernigan & Beggs, 2005; Meyer & Allen, 1997; Riordan, Griffith, & Weatherly, 2003). Meyer and Allen (1997) found a significant but weak correlation between age and organizational commitment. Riordan et al. (2003) indicated that organizational commitment and job satisfaction decreased with age among lower paid employees. Jernigan and Beggs (2005) wrote:

… it is possible that additional formal education could lead to a greater sense of empowerment that may reduce the commitment that an individual might feel. However, additional levels of formal education may cause an individual to feel less obligated to be involved with the organization, rather than reducing one’s sense of alienation. (p. 2188)

Scott, Swortzel, and Taylor (2005) studied the relationship between job satisfaction and demographic variables among 143 Mississippi Extension agents. The authors reported a low significant correlation between gender and three dimensions of job satisfaction (i.e. growth satisfaction, satisfaction with job security, and satisfaction with pay). A low significant correlation was indicated between job satisfaction and race, with Caucasians reporting lower satisfaction with supervisor and general satisfaction than other races. There was no significant correlation between job satisfaction and marital status, job satisfaction and education, and job satisfaction and age (Cano & Miller, 1992). Berns (1989) concluded that the number of years of teaching experience and the higher education level of the teacher (master’s degree versus bachelor’s degree) positively related to job satisfaction. Bowen, Radhakrishna, and Keyser (1994) found that older 4-H agents had higher job satisfaction. However, Andrews (1990) reported no relationship between job satisfaction and Extension agents’ age. Fetsch and Kennington (1997) suggested that Extension agents who were never married or widowed had lower job satisfaction compared to married and divorced agents. Bowen et al. (1994) reported that male Extension agents were less satisfied with their jobs compared to female agents. Foster and Steevers (2003) conducted a qualitative research of women in Agricultural and Extension Education, where they explored barriers in the profession. They noted:
I am still putting off starting a family … Not married and no children.

Would like to have a family, but can’t seem to find a man willing to put up with me – a woman with PhD isn’t all that common to describe, also if I have a child – who would raise him or her? I fear day care. (p.37)

Jepsen and Rodwell (2012) conducted research on gender differences on turnover intention, job satisfaction, and organizational commitment. The authors found that men and women have different perceptions on the studies’ factors. Walsh and Bartikowski, (2013) suggested that gender has a moderating effect on turnover intention. Botsford-Morgan and King (2012) indicated that supervisor’s responsiveness decreased employee intention to leave the organization, and turnover intention was affected by gender.

An employee’s attitude toward job satisfaction and organizational commitment was affected by age (Burdett, Carrillo-Tudela, & Coles, 2011; Hokanson, Sosa-Fey, & Vinaja, 2011, Lambert, Cluse-Tolar, Pasupuleti, Prior, & Allen, 2012; Wren, Berkowitz, & Grant, 2014). Hokanson, Sosa-Fey, and Vinaja (2011) indicated that Generation’s X and Y tend to stay with an organization for a shorter time, on average three years. Age and salary were important antecedents of the employee’s intention to leave the organization (Burdett, Carrillo-Tudela, & Coles, 2011; Hokanson et.al., 2011). Nitesh, Nandakumar and Asok, (2013) mentioned that satisfaction with pay and tenure have a moderate effect on the relationship between employee turnover intention and job satisfaction in an academic institution.

For the purpose of this study, the researcher has included demographics factors which added an explanatory value in turnover intention research among Extension
program assistants. The selected demographic groups for this study were age, gender, degree level, marital status, children living at home, number of years in OSU Extension, and program areas.

**Conceptual Framework**

Based on the literature a conceptual model of Employee’s Turnover Intention was created. The conceptual model illustrated the relationships among the four variables including employee turnover intention, organizational commitment, job satisfaction, satisfaction with supervisor, and demographics, as shown in Figure 2.11. The dependent variable is employee turnover intention. There are four independent variables: organizational commitment, job satisfaction, satisfaction with supervisor, and demographics. The direction of the arrows illustrates the relationship among variables in the conceptual model. Dotted lines indicate a hypothesized mediating effect.

Based on the literature review and conceptual framework, the following hypotheses are proposed: (1) organizational commitment, job satisfaction, satisfaction with supervisor will have negative significant association with employee turnover intention; (2) satisfaction with supervisor will predict employee turnover with a direct effect; (3) independent variables correlate to dependent variable; (4) organizational commitment (IV) will mediate the relationship between job satisfaction and turnover intention; (5) satisfaction with supervisor will mediate the relationship between job satisfaction and turnover intention.
Figure 2.11 Conceptual Model of Employee’s Turnover Intention.

*Note:* Dashed arrows inside of the model indicate an interaction (mediation) effect of organizational commitment and satisfaction with supervisor on relationship between job satisfaction and turnover intention.

**Summary**

The literature review suggested that a turnover of Extension professionals across all four program areas negatively impacts Extension clientele and the Extension organization in a whole. Many turnover studies have been conducted researching Extension agents, sometimes called Extension educators. However, further examination of turnover intention among Extension program assistants is needed because there is no research that investigates the factors influencing their turnover intention. In an effort to
address the Extension program assistant shortage, it is important to know the factors that create the intention to leave a job in the Extension organization.

In Chapter 2, I discussed the nature of Extension work and its specifics. Factors affecting employee turnover and barriers associated with this issue in Cooperative Extension were presented based on the previous research results. The theoretical foundation of the independent and dependent variables, along with literature, was discussed. There were four turnover models presented: March and Simon (1958) Decision to Participate Turnover Model, Mobley (1977) Intermediate Linkage Model, Muchinsky, and Morrow's (1980) Model of Turnover, and Price (2001) Causal Model of Turnover. Previous research linked organizational commitment, job satisfaction, and satisfaction with supervisor with turnover and turnover intention. Organizational commitment, job satisfaction, and turnover intention in Cooperative Extension among Extension educators has been studied by researchers from Ohio, Virginia, West Virginia, Kentucky, Florida, Rhode Island, Texas, Colorado, and Louisiana; however, there appear to be no studies regarding Extension program assistants. Extension program assistants are working under similar work conditions as other Extension professionals.

According to previous research, the turnover intention among Extension educators was influenced by organizational commitment, job satisfaction, satisfaction with supervisor and demographic variables; it is important to investigate similar factors among program assistants. Therefore, the purpose of this quantitative study was to examine the relationship among independent variables (organizational commitment, job satisfaction, satisfaction with supervisor, and demographic variables) and the dependent variable
(turnover intention), while also investigating the mediation effects of employee’s organizational commitment and satisfaction with supervisor on relationship between job satisfaction and turnover intention.
Chapter 3 Methods

Chapter 3 in this dissertation discusses the type of research, purpose of the study, research questions, context, and research design. The research design contains information about study population, instrumentation, variables, data collection procedure, and data analysis.

Type of Research

A quantitative research methodology was used for this study based on a descriptive–exploratory study and correlational research design. An online survey was used for data collection. A cross-sectional (survey) design is well-known and widely used in Agricultural Education and Extension research. This cross-sectional research provided a 'snapshot' of employees’ turnover intention and factors associated with it at a specific point in time. The research design helped the researcher to describe the population of this study with respect to a dependent variable and a set of predicted factors. Turnover intention was the dependent variable of interest in this research. Organizational commitment, job satisfaction, satisfaction with supervisor, and demographics were four independent variables investigated in this study.

Purpose and Research Questions

Turnover studies related to Cooperative Extension organizations have been conducted over the last 35 years. The results of previous research identified many factors
related to employees’ turnover and turnover intention, namely heavy work load, burnout, occupational stress, balancing work and family life, low salary, work hours, late night meetings, lack of recognition, high requirements for advancement, organizational commitment, job satisfaction, organizational justice, and other factors (Clark, 1981; Van Tilburg, 1987; Van Tilburg, 1988; Clark, Norland, & Smith, 1992; Ensle, 2005; Rousan & Henderson, 1996; Sears Jr, Urizar Jr, & Evans, 2000; Kutilek, 2000; Holtom, Mitchell, Lee, & Eberly, 2008; Strong & Harder, 2009; Safrit, & Owen, 2010; Young, Stone, Aliaga, & Shuck, 2013; Harder, Gouldthorpe, & Goodwin, 2015). Extension professionals’ turnover rates and prolonged vacancies negatively affect organizational performance due to loss of financial and material resources associated with recruitment, hiring, and training costs of new employees. County programs suffer because of suspended educational programs, disrupted professional networks, unmet community needs, loss of clientele, and low morale among remaining Extension staff (Kutilek, 2000; Strong & Harder, 2009; Safrit, & Owen, 2010; Ensle, 2005).

Almost all Cooperative Extension employees’ turnover studies investigated Extension agents as a subject of study; however, there is no research that examines turnover intention among Extension program assistants. According to Lee and Mitchell’s (1994) “Unfolding Model of Voluntary Turnover,” employees in different job categories are more likely to pursue their decision to quit a job in different ways, which is why the researcher believes that it is important to study turnover intention among Extension program assistants as well. Also, gaps exist in literature regarding the interactive effects ( moderation and mediation) among investigated variables across turnover models.
(Jackofsky, 1984; March & Simon, 1958; Mitchell & Lee, 2001; Mobley, 1977; Porter & Steers, 1973; Price, 2001). Thus, it is expedient to examine mediation effects of intervening variables (i.e., organizational commitment and satisfaction with supervisor) on relationships between job satisfaction and turnover intention that have not been researched in the Extension field previously.

The purpose of this study was to investigate factors that affect turnover intention. This study explored the relationships between turnover intention and organizational commitment, job satisfaction, satisfaction with supervisor, and demographic variables. Moreover, this study examined mediation effects of intervening variables on relationships between job satisfaction and turnover intention of Extension program assistants that were not found in the Cooperative Extension literature.

Four research questions guided this study:

1. What is the relationship between employee turnover intention and selected demographics such as age, gender, degree level, program areas, marital status, children living at home, and number of years working in organization?

2. What is the relationship between turnover intention and independent variables organizational commitment, job satisfaction, and satisfaction with supervisor?

3. To what extent does satisfaction with supervisor predict employee turnover intention controlling for age and years of service?

4. To what extent do organizational commitment and satisfaction with supervisor mediate the relationships between job satisfaction and turnover intention?
Context

Ohio State University Extension (OSU Extension) was selected as the context of the employee turnover intention study. OSU Extension is fulfilling the land-grant university mission with community-based research and outreach serving every Ohio county, delivering new knowledge to individuals, families, and their communities. Nearly 700 employees in OSU Extension work across four major program areas namely: agriculture and natural resources, 4-H youth development, community development, and family and consumer science (OSU Extension, 2014-2019 Strategic plan). Extension educators and program assistants engage people through non-formal educational programs. Six impact areas were identified in 2016 as a focus for Extension programming: 1) health and wellness, 2) job skills and careers, 3) thriving across the life span, 4) sustainable food systems, 5) engaged Ohioans, vibrant communities, and 6) environmental quality. OSU Extension professionals address both rural and urban issues. The organization emphasizes new technologies in agriculture, productivity, leadership, youth development, health and well-being, and other social and economic areas that improve human life (OSU Extension Mission, Vision, and Values).

Study Population

The target population for the study was Cooperative Extension employees, specifically Extension program assistants. The accessible population represents a sample of all county Extension program assistants in Ohio. A census of program assistants with a 0.75 to 1.0 FTE, employed as of October 21, 2016 by OSU Extension, was used in this study. The researcher obtained a list of 182 full-time county Extension program assistants.
from the OSU Extension Human Resources for the data collection procedure. The researcher obtained permission to conduct a turnover intention study on county Extension program assistants from the Director of OSU Extension and the OSU Institutional Review Board during the fall semester of 2016.

**Instrumentation**

A questionnaire for this research was developed using four existing instruments that have been extensively used in the literature. The instruments included:

- *Organizational commitment questionnaire* (Mowday, Steers, & Porter, 1979);
- *Job Satisfaction Survey* (JSS) Spector (1985), Copyright Paul E. Spector 1994, All rights reserved;
- *The satisfaction with my supervisor* (Scarpello & Vandenberg, 1987); and
- *Turnover intention* (Michigan Organizational Assessment Questionnaire (MOAQ), Cammann, Fichman, Jenkins, & Klesh, 1979).

Each instrument used to develop scales for this research are described below.

**Job Satisfaction Survey (By Spector, 1985)**

Extension employees’ job satisfaction was measured by Spector’s (1985) Job Satisfaction Survey (JSS), Copyright Paul E. Spector 1994, All right reserved. Spector (1985) developed this instrument “specifically for human service, public, and non-profit sector organizations” (p. 693). The multitrait-multimethod and intercorrelational analyses provided evidence for convergent and discriminant validity. Confirmatory factor analysis helped to identify the eight-faced construct of the JSS. Authors mentioned that 19 studies that were conducted across human service and public organizations, and supported the validity and reliability of the JSS. The questionnaire had strong associations with other
attitudinal and perceptional factors (Spector, 1985). The instrument comprises of nine domains of job satisfaction constructs within 36 items. The job satisfaction domains and examples of items of original JSS questionnaire (Spector, 1985) presented in Table 3.1.

Table 3.1
Nine Domains of the JSS Questionnaire and Examples of the Items

<table>
<thead>
<tr>
<th>Job Satisfaction Domain</th>
<th>Item Example</th>
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<tbody>
<tr>
<td>1 Satisfaction with pay</td>
<td>“I feel I am being paid a fair amount for the work I do”</td>
</tr>
<tr>
<td>2 Satisfaction with promotional opportunity</td>
<td>“There is really too little chance for promotion on my job (R)”</td>
</tr>
<tr>
<td>3 Satisfaction with fringe benefits:</td>
<td>“I am not satisfied with the benefits I receive (R)”</td>
</tr>
<tr>
<td>4 Satisfaction with contingent rewards (appreciation and recognition)</td>
<td>“When I do a good job, I receive the recognition for it that I should receive”</td>
</tr>
<tr>
<td>5 Satisfaction with supervision</td>
<td>“My supervisor is unfair to me (R)”</td>
</tr>
<tr>
<td>6 Satisfaction with operating procedure</td>
<td>“Many of our rules and procedures make doing a good job difficult (R),”</td>
</tr>
<tr>
<td>7 Satisfaction with co-workers</td>
<td>“I find I have to work harder at my job than I should because of the incompetence of people I work (R)”</td>
</tr>
<tr>
<td>8 Satisfaction with nature of work itself</td>
<td>“I feel a sense of pride in doing my job,”</td>
</tr>
<tr>
<td>9 Satisfaction with communication</td>
<td>“Communications seem good within this organization”</td>
</tr>
</tbody>
</table>
The Job Satisfaction constructs were measured on a 6-point Likert-type scale (Spector, 1985), where 1 = disagree very much, 2 = disagree moderately, 3 = disagree slightly, 4 = agree slightly, 5 = agree moderately, and 6 = agree very much (Spector, 1985, p.708). The internal consistency reliability coefficient was computed for each facet on a sample of 2,870. Cronbach alpha for total satisfaction was .91, satisfaction with pay – .75, promotion – .73, supervision – .82, benefits – .73, contingent rewards – .76, operating procedures – .62, co-workers – .60, nature of work itself – .78, and communication – .71. Test-retest reliability was calculated on small sample of 43 individuals, with a reliability coefficient of .71 (Spector, 1985). The researcher obtained permission to use the JSS in this research study from the original author, see Appendix A.

In this study, satisfaction with supervisor was viewed as a separate construct that allowed the researcher to measure satisfaction with supervisor with a more robust scale, asking more questions. According to Smith, Kendall, and Hulin (1969) the supervisor plays an important role in the employee’s attitude and perception of the work. Wheeless, Wheeless, and Howard (1984) said communication satisfaction with supervisor and supervisor receptivity to information are two salient factors from the employee’s perspective. Therefore the subscale for satisfaction with supervisor was omitted from the JSS and replaced with a more robust scale measuring satisfaction with supervisor. Scarpello’s (1987) Satisfaction with My Supervisor Scale was utilized to better understand employees’ attitudes and perceptions toward supervisors.
The Satisfaction with Supervisor Scale (By Scarpello, 1987)

As was mentioned above, satisfaction with supervisor was viewed as a separate construct. Maertz et al. (2007) emphasized that the employee - supervisor relationship directly impacts an employee’s decision related to turnover and has implications for future studies. Scarpello (1987) indicated that many leadership studies investigated supervisory effectiveness, while job satisfaction studies assessed employees’ perception about their work and supervisor. Scarpello indicated that the role of supervisors in organizations is very important, and there were a lack of instruments that measured variables influencing an employee’s attitude toward his supervisor. Scarpello (1987) wrote “currently available job satisfaction questionnaires are inadequate for measuring the satisfaction with the supervisor construct … they intended to assess satisfaction with multiple job facets, only one of which is supervision” (p. 448). The author noted “If subordinate satisfaction with immediate supervision has important implications for organizational effectiveness, there is a need for a valid and diagnostic instrument capable of measuring a large portion of the content domain of the satisfaction with the supervisor construct” (p. 449).

Satisfaction with supervision was removed from the original instrument of job satisfaction that was measured through four items. In this study satisfaction with supervisor was measured using Scarpello & Vandenberg’s (1987) The Satisfaction With My Supervisor Scale (SWMSS). The SWMSS instrument was developed specifically to “assess subordinate satisfaction with supervision,” rather than work environment, using
18 items (p. 462). The SWMSS questionnaire represents supervisory effectiveness through three interrelated skills: (1) technical, (2) human relations, and (3) administrative.

One global construct was measured through the following questions: “The way my supervisor listens when I have something important to say”, “The way my supervisor sets clear work goals”, “The way my supervisor treats me when I make a mistake”, “The way my supervisor gives me clear instruction”, “The way my supervisor understands the problems I might run into doing the job”, “My supervisor backing me up with other management”, “The amount of time I get to learn a task before I’m moved to another task”, and “The way my job responsibilities are clearly defined”. Responses to each item were measured on a 1-5 Likert-type scale, labeled 1 = very dissatisfied, 2 = dissatisfied, 3 = neither satisfied nor dissatisfied, 4 = satisfied, and 5 = very satisfied.

This instrument was used on 2,101 employees of seven production plants of a multinational U.S.-based corporation. One single item global construct measured worker’s perceptions and satisfaction with supervisor, the high magnitude was explained through all 18 items. Thus, controlled $R^2$ was varied from .58 to .77, while uncontrolled $R^2$ was varied from .76 to .88. This fact was indicated on the SWMSS scale’s content and predictive validity. Convergent and discriminant validity of the SWMSS was high according to the author. Principal component analysis did not support the two-factor model, thus the one-factor model was relatively stable with additional principal-axis analysis. The internal consistency was measured by Cronbach alpha and ranged from .95 to .96 across all seven plants (Scarpello, 1987). Validity generalizability was assessed through regression analysis and Campbell and Fiske’s multitrait-multimethod approach.
Scarpello (1987) concluded that the provided scale was able to measure the criteria through assessing subordinates perceptions regarding satisfaction with supervisor, and the SWMSS was a valid measurement instrument that can be used by researchers and organizational decision makers. Eighteen items out of 18 were used in this study to assess OSU Extension program assistants. The researcher obtained permission to use the SWMSS in this research from author, see Appendix B.

**Organizational Commitment Questionnaire (Mowday, Steers, & Porter, 1979)**

To measure Extension employees’ organizational commitment, the Mowday, Steers, and Porter (1979) questionnaire was utilized. The original instrument contains 15 items that represent three aspects of the authors’ definition of commitment: (1) strong belief in and acceptance of the organization’s goals and values, for example, “I find that my values and the organization’s values are very similar”; (2) a willingness to exert considerable effort on behalf of the organization, for example, “I am willing to put in a great deal of effort beyond that normally expected in order to help this organization be successful”; and (3) a strong desire to maintain membership in the organization, for example, “I am extremely glad that I chose this organization to work for over others I was considering at the time I joined” (p.226 – p.228). Responses to each item are measured on a 7-point Likert-type scale with the following anchors labeled: (1) strongly disagree; (2) moderately disagree; (3) slightly disagree; (4) neither agree nor disagree; (5) slightly agree; (6) moderately agree; (7) strongly agree. The *Organizational Commitment Questionnaire* (OCQ) was originally administered in nine different private and public organizations on 2563 employees, namely public employees, classified university
employees, hospital employees, bank employees, telephone company employees, scientists and engineers, auto company managers, psychiatric technicians, and retail management trainees.

Authors evaluated the following psychometric properties of the new developed instrument: (1) means and standard deviation, (2) Cronbach alpha coefficient, (3) test-retest reliability, (4) predictive validity, (5) convergent validity, and (6) discriminant validity. Cronbach alpha coefficient showed high levels of internal consistency of the construct with a median of .90 (ranging from .82 to .93). Average correlations varied from .36 to .72, the median correlation was .64. Authors noted that positively worded items were more highly correlated than negatively worded items. Test-retest reliability varied from .54 to.75. The result of convergent validity findings provided evidence of validity of the OCQ. The results of the discriminant validity stated that common variance shared by commitment and other measures varied from 25 to 50 percent.

Mowday, Steers, and Porter (1979) suggested that the questionnaire helps researchers to get a better understanding of the “role of employee attitudes (including commitment) in the determination of employee behavior and organizational performance” (p. 245). Nine (positively correlated) items out of the 15 were used in this study. In 2011, Martín conducted a dissertation research on 480 Extension educators across the 12 Southern States to investigate the Extension employee intention to quit. The author measured turnover intention through human resource practices, job satisfaction, and organizational commitment. He used the same nine out of 15 items of the OCQ that was used in this current study and “reliability for these nine items using Cronbach’s alpha
was .914” p. 93. (Martin, 2011) The researcher obtained permission to use OCQ (Mowday, Steers, and Porter, 1979) in this research from original author even though that instrument was not copyrighted, see Appendix C.

**Turnover Intention (The Michigan Organizational Assessment Questionnaire, By Cammann, Fichman, Jenkins, & Klesh, 1979)**

Turnover intention is the dependent variable in this study. An employee’s turnover intention was measured using the Michigan Organizational Assessment Questionnaire (MOAQ) (Cammann, Fichman, Jenkins, & Klesh, 1979). The MOAQ is an employee attitude survey, which includes more than 350 items. The MOAQ includes ten standardized modules. Module 2 measured an employee’s general attitude. One of the addressed variables was intention to turnover. Intention to turnover was measured by the following three-item scale: (1) “How likely is it that you will actively look for a new job in the next year?” (2) “I often think about leaving the organization”; and (3) “I will probably look for a new job in the next year” (Cammann et al., 1979). Responses to each item were measured on a 1-7 rating Likert-type scale labeled: 1 = strongly disagree, 2 = disagree, 3 = slightly disagree, 4 = neither agree nor disagree, 5 = slightly agree, 6 = agree, and 7 = strongly agree. Nunnally and Bernstein (1994) suggested obtaining a composite score through computation of the mean of the three items to minimize data analysis-practice biases. The high composite score indicates higher turnover intention among employees. The intention to turnover scale was replicated through 61 studies and demonstrated good reliability and validity. The Cronbach alpha coefficient varied from study to study: .83 (Cammann, Fichman, Jenkins, & Klesh, 1979; Seashore, Lawler,
Mirvis, & Cammann, 1982); .88 (Abraham, 1999), .86 (George & Jones, 1996), .85 (Kumar & Eng, 2012), .91 (Jafari, Moradi, & Ahanchi, 2013), .92 (Saleem & Gul, 2013) and .86 (Jonathan, Thibeli & Darroux, 2013). The researcher obtained permission to use the Turnover Intention instrument in this research (see, Appendix D).

**Final Instrument for This Study**

A questionnaire for this research was developed using four existing instruments. The instruments included: *Organizational commitment questionnaire* (Mowday, Steers, & Porter, 1979); *Job Satisfaction Survey* (JSS) Spector (1985), Copyright Paul E. Spector 1994, All rights reserved; *The satisfaction with my supervisor* (Scarpello & Vandenberg, 1987); and *Turnover intention* (Michigan Organizational Assessment Questionnaire (MOAQ), Cammann, Fichman, Jenkins, & Klesh, 1979). Each instrument used to develop scales for this research is described below. The summary of the instrument that was used in this study and measured turnover intention among Extension program assistants is represented in Table 3.2.

The final instrument that was used in this study included 62 items namely: 9 items measured organizational commitment; 32 items measured job satisfaction; 18 items measured satisfaction with supervisor; and 3 items measured turnover intention. Also seven demographic questions were asked. Total scores for each construct were summed as a mean of measure to study participants’ organizational commitment, job satisfaction, satisfaction with supervisor, and turnover intention. A web-survey on the Qualtrics® platform was designed based on the selected template. A full version of the instrument presented in Appendix E.
Table 3.2
Summary of The Instruments That Used in This Research

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Variable Measured</th>
<th>Scale</th>
<th>Cronbach Alpha Original / (From this Study)</th>
<th>Total items (Items adapted for this research)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational commitment questionnaire (Mowday, Steers, &amp; Porter, 1979)</td>
<td>Organizational commitment</td>
<td>7-point Likert-type scale from 1 = strongly disagree to 7 = strongly agree.</td>
<td>0.82 - 0.93 (.91)</td>
<td>15 (9)</td>
</tr>
<tr>
<td>Job Satisfaction Survey* (Spector, 1985)</td>
<td>Job satisfaction</td>
<td>6-point Likert-type scale from 1 = disagree very much to 6 = agree very much.</td>
<td>0.91</td>
<td>36 (32)</td>
</tr>
<tr>
<td>The Satisfaction With My Supervisor Scale (Scarpello, 1987)</td>
<td>Satisfaction with supervisor</td>
<td>5-point Likert-type scale from 1 = very dissatisfied to 6 = very satisfied.</td>
<td>0.95 - 0.96 (.96)</td>
<td>18 (18)</td>
</tr>
<tr>
<td>The Michigan Organizational Assessment Questionnaire (MOAQ) (Cammann, Fichman, Jenkins, &amp; Klesh, 1979).</td>
<td>Turnover intention</td>
<td>A 7-point Likert-type scale from 1 = strongly disagree to 7 = strongly agree.</td>
<td>0.83 (.93)</td>
<td>3 (3)</td>
</tr>
</tbody>
</table>

Note: * The following were Cronbach alpha coefficients from original instrument for the eight subscales of the Job Satisfaction instrument (except satisfaction with supervisor subscale): pay (.75); promotion (.73); benefits (.73); contingent rewards (.76); operating procedure (.63); co-workers (.60); nature of work (.78); communication (.71).
Variables

Dependent Variable

The dependent variable examined in this research was turnover intention. The turnover intention variable was computed as a mean of the composite score of the turnover intention scale with three items using a 7 point Likert-type scale.

Independent Variables

The four independent variables in this research were measures of organizational commitment, job satisfaction, satisfaction with supervisor, and demographics. The organizational commitment variable was computed as a mean of the composite score of the organizational commitment scale including nine items based on a 7-point Likert-type scale (from 1 = strongly disagree to 7 = strongly agree). The job satisfaction variable was computed as a mean of the job satisfaction scale collected using self-reported data from program assistants regarding their job-related perceptions and feelings. A 6-point Likert-type scale (from 1 = disagree very much to 6 = agree very much) was used to measure job satisfaction. The satisfaction with supervisor variable was computed as a mean of the satisfaction with supervisor score collected from Extension program assistants on their attitudes and feelings toward their direct supervisor. A 5-point Likert-type scale (from 1 = very dissatisfied to 5 = very satisfied) was used to rate the satisfaction with supervisor. Also, two independent variables, organizational commitment and satisfaction with supervisor, were used as intervening variables to measure the interactive (mediating) effect on the relationship between job satisfaction and turnover intention.
The profile of the study population was reported, based on the demographic and background variables of OSU Extension program assistants. Moreover, demographic variables were used to answer the first research question in this study. Demographic variables included were gender, age, degree level, marital status, children living at home, years of service, and program area.

Gender was collected using self-reported data from Extension program assistants. The variable used a nominal scale and was recorded as 1 = male and 0 = female. Age was measured in ratio scale, with participants asked to indicate their age. Educational level was measured utilizing five categories: 1 = High school diploma, 2 = Associate’s degree, 3 = Bachelor’s degree, 4 = Master’s degree, 5 = Doctoral degree. Marital status was measured using five categories: 1 = single, 2 = married, 3 = divorced, 4 = widowed, 5 = domestic partner. Children living at home was measured by a nominal scale, where 0 = no, 1 = yes. Years of service used a ratio scale. Study participants were asked to indicate the number of years of service. Respondents were asked to indicate the program areas based on the major portion of work time allocated. There were four categories offered for selection: 1 = agriculture and natural resources, 2 = 4-H youth development, 3 = community development, 4 = family and consumer science, and 5 = other.

**Data Collection Procedures**

Data for this study were collected from Extension program assistants in Ohio. The Director of OSU Extension supported the research with Extension program assistants and approval for this research was granted by The Ohio State University’s Behavioral and Social Sciences Review Board (See Appendix F & G for copies of these letters). A
census of program assistants with a 0.75 to 1.0 FTE who were employed during the 2016-2017 fiscal year by OSU Extension was used in this study. Program assistants’ perceptions were assessed through an online, self-administered questionnaire. Qualtrics survey software was utilized to administer the questionnaire. Qualtrics is a secure web-based software that helps create customized online survey invitations and follow-up emails to each participant (Qualtrics, official website).

The researcher obtained Extension program assistants’ email addresses from the College of Food, Agricultural, and Environmental Sciences Human Resources. The program assistants’ emails were loaded into the Qualtrics online survey platform. Using Dillman et. al., (2014) online data collection techniques, the researcher used a pre-notification and five-contact emails survey approach. Data collection took place from January 11, 2017 to January 27, 2016. Qualtrics helped the researcher facilitate the distribution of the welcome message, questionnaire, and four follow-up emails. The Extension Director co-signed the third reminder email. The pre-notification email, an original invitation email, and four reminder emails messages were sent to each participant in the study population. Participants received an original invitation email with an individual link (a basic hyperlink) and were asked to participate in a voluntary turnover intention study. Participants were informed that all their answers to the questions would remain confidential and that collected data would be used for research purposes only. All information was grouped with other participant’s answers and reported as aggregated data for further statistical analysis. Respondents could withdraw answering questions at
any point during the survey. The survey took about 15 - 20 minutes to complete. See Appendix G for all email communication with study participants.

Data collection procedure step-by-step:

Step 1. The list with email addresses of all 182 Extension program assistants from all 88 counties was obtained from the College of Food, Agricultural, and Environmental Sciences Human Resources.

Step 2. First pre-notification letter was distributed as an email message to 182 Extension program assistants in Ohio, on January 9, 2017 from the Extension Director and the second one from the researcher on January 11, 2017. The pre-notification emails informed participants about the purpose and objectives of the research project, its significant importance to the Extension organization; contact information of researcher; voluntary nature of the study, and notification about an upcoming original invitation email from the researcher (see Appendix H).

Step 3. The list of Extension program assistants was entered into the Qualtrics® program. A customized link (URL, or basic hyperlink) was created for each Extension program assistant for the data collection procedure. A random code was given to each participant.

Step 4. The online survey was launched on January 11, 2017. Participants received an original invitation email (Appendix H). The original invitation email included the purpose of the study, significance of the research, the researchers’ contact information, survey completion deadline, assurance that the study was voluntary, an
estimated time required to complete the survey, and an individual link for each employee. The link was connected to the Qualtrics® online survey portal.

Study participants accessed the survey by clicking the link (URL) or by copying and pasting the questionnaire URL into an Internet browser. The link took participants to an introductory screen on the Qualtrics platform (see Appendix E). A welcome message included informed consent language on the first webpage when a participant logged into the survey. The participants gave permission for the researcher to use the collected data for research purposes by completing the electronic survey. Participants were allowed to withdraw from the online survey, with no answer provided, at any time.

Four follow-up emails were sent to non-respondents during the 17-day data collection procedure (see Appendix H). Participants were informed that all their answers to the questions would remain confidential, collected data would be used for research purposes only, and that all information would be grouped with other participants and reported as aggregated data for further statistical analysis. The first follow-up email from the researcher was sent on January 17, 2017 to remind participants who had not responded. A second follow-up email was sent on January 19, 2017 to non-respondents. After two follow-ups, the researcher received 67.6% responses. A third follow-up email was sent on January 24, 2017. A final follow-up email was sent on January 26, 2017 to the remaining 40 non-respondents asking them to participate in the voluntary employee turnover intention study and to complete the survey by 11:59 PM on January 27, 2016. The 17 days of the data collection procedure with four follow-up emails ceased on January 27, 2017. There were no additional email reminders or contact with non-
respondents. The overall response rate for this study was 84% (n=153). For data analysis purposes, the final data set that was used included 149 Extension program assistants in Ohio, representing a response rate of 81.7 % for usable data.

To motivate employees to participate in survey, eight $25.00 prepaid Visa cards were offered to responding Extension program assistants. Study participants were informed about the incentive and their eligibility for the drawing in the pre-notification, invitation, and follow-up emails. The electronic system randomly identified eight email addresses after the data collection procedure was officially finished. The researcher contacted the randomly identified participants via email and the $25.00 prepaid Visa cards were mailed to the recipients.

**Data Analysis**

Data were collected via the Qualtrics® program for the turnover intention, organizational commitment, job satisfaction, and satisfaction with supervisors. Collected data were transferred into two software programs—Statistical Product and Service Solution (SPSS®) software version 24 and SPSS SOBEL Macro®—for further statistical analysis.

The study population was described using descriptive statistics. Frequencies were used for dichotomous, categorical variables such as gender, degree level, marital status, children living at home, and program area. Means and standard deviations were used for all non-categorical variables such as age and years working in OSU Extension. Independent construct variables (organizational commitment, job satisfaction, and
satisfaction with supervisor) and the dependent variable, turnover intention, were treated as interval data.

The chi-squared test of independence was used to describe the relationship between employee turnover intention and selected categorical demographic variables, such as gender, degree level, program areas, marital status, and children living at home. The chi-squared test provided a report of the demographic factors (indicated above) that helped to describe each independent variable, discussed the number of levels of each variable (for example gender: male and female) and explained the dependent variable – turnover intention.

Multiple regression analysis was used to describe the relationship between employee turnover intention and selected non-categorical demographic variables, such as age, number of years working in OSU Extension. Also, multiple regression analysis was used to describe the association of several predictors to the dependent variable. Coefficient of determination $R^2$ indicates how well the data fit the regression model. $R^2$ is a proportion of variance in the turnover intention that can be explained by the variables (job satisfaction, satisfaction with my supervisor, and organizational commitment) in the regression model. There are several assumptions while conducting a multiple regression—namely, linearity (dependent variable has a linear relationship to each independent variable), independence (errors are independent of one another), homoscedasticity (equal variance of the errors across the regression line, different levels of independent variables), and normality (errors have a mean of 0 and are normally distributed). Also, multicollinearity was observed through the Pearson correlation table,
tolerance (which indicated how much of the variance in each independent variable is independent of the other), variance inflation factor, and multicollinearity diagnostic.

Multiple regression helped to explain the variation of each independent variable in turnover intention. Also, a Pearson product-moment correlation was used to describe how well the dependent variable explained the set of predictor factors through the assessment of the magnitude of the linear relationship between dependent and independent variables. To describe the magnitude of the correlation between independent and dependent variables, standard Davis (1971) Conventions were used (see Table 3.3).

Table 3.3
Describing the Magnitude of Correlations Based on Davis’ (1971) Conventions

<table>
<thead>
<tr>
<th>Magnitude of correlation coefficient</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.00</td>
<td>Perfect association</td>
</tr>
<tr>
<td>0.70 or higher</td>
<td>Very strong association</td>
</tr>
<tr>
<td>0.50 to 0.69</td>
<td>Substantial association</td>
</tr>
<tr>
<td>0.30 to 0.49</td>
<td>Moderate association</td>
</tr>
<tr>
<td>0.10 to 0.29</td>
<td>Low association</td>
</tr>
<tr>
<td>.01 to 0.09</td>
<td>Negligible association</td>
</tr>
</tbody>
</table>


A hierarchical approach of multiple regression was used to examine the relationship between turnover intention and satisfaction with supervisor, while controlling demographic variables such as age and years of service. Hierarchical regression is a multi-step multiple regression. The researcher added two blocks of independent variables sequentially into the model. The purpose of doing this was to partial out the effect of control variables (covariates) all at once. The control variables (age and years of services) were added into the model first, and then the independent
variable (satisfaction with supervisor) was entered to explain the remaining variance in the dependent variable. In addition, the researcher examined the significance of the change in the variability in turnover intention that can be explained (R^2 change) and each step’s (block of independent variables) unique contribution explaining the variability in turnover intention. R^2 is the proportion of the variance in the dependent variable (y) that can be explained by the independent variable(s)/predictor(s) in the model (x’s). A partial correlation tells the researcher the correlation between turnover intention and Xp (satisfaction with supervisor), once the effects of all other variables in the model have been removed or controlled for (age and years of service). Also the partial correlations (and their squared values) helped clarify the strength of variable effects in the presence of multicollinearity (Yi-En Wei, 2014).

A hierarchical regression and SOBEL test were used to identify the mediation effect each intervening variable (organizational commitment and satisfaction with supervisor) in a causal relationship between job satisfaction and turnover intention. According to Payrot (1996) “mediate means to serve as an intervening variable in an indirect effect” (p. 6). Variables were entered hierarchically, in order of their links in the causal chain. There were two hypothesized intervening variables in this study—namely employees’ organizational commitment, and satisfaction with job supervisor—which are the mediators. The researcher hypothesized that organizational commitment and satisfaction with supervisor mediate the relationship between job satisfaction and turnover. So, the mediation effect, in which predictor (independent variable) leads to outcome (dependent variable) through intervening variable (mediator), is called the
indirect effect. In other words, in this study the researcher tested the significance of the indirect effect through the portion of the relationship between independent and dependent variables that was mediated by the intervening variable. The regression coefficient for the mediation effect represents the change in dependent variable for every unit change in independent variable that is mediated by the intervening variable. For all statistical analysis conducted in this study, the a priori alpha level of .05 was selected as the probability threshold for determining statistical significance to calculate the indirect effect and test for significance. The regression coefficient for the indirect effect represents the change in Y for every unit change in X that is mediated by M see Figure 3.1.

![Diagram of mediation effect](image)

**Figure 3.1 Mediation Effect (Baron & Kenny, 1986).**

Mediation analysis requires the following steps to estimate the significance of the coefficients of the path. *In step 1*, conduct a simple regression analysis where
independent variable (x) predicts dependent variable (y) to test for path c with no intervening variable (m), (see Figure 3.1). In step 2, conduct a simple regression where the independent variable (x) predicts mediator (m) to test path a. In step 3, conduct a regression analysis where the dependent variable (y) must be predicted by the independent variables (x) and the mediator (m). Coefficient of multiple determination ($R^2$) was calculated and explained the proportion of the variance in the dependent variable that was predicted by the independent variable to estimate the significance of the mediation paths illustrated above. The $R^2$ change explained the contribution of the intervening variable that was added in the model. The Sobel (1982) normality theory test was used to calculate the indirect effect of organizational commitment and satisfaction with supervisor on relationship between job satisfaction and turnover intention.

**Managing Sources of Error**

**Non-Response Error**

Dillman (1978) recommended providing material and financial incentives, sending a cover letter, follow up reminders, keeping responses anonymous, and other stimulus to improve study participants’ response rates. To control non-response error, the researcher used the following techniques: a pre-notification email about an OSU Extension program assistant turnover study, an original invitation email to participate in the voluntary study, and four follow-up emails to prompt more responses.

Miller and Smith (1983) suggested comparing early and late respondents assess non-response error. Early and late responses were compared to evaluate non-response error in this study. The first forty respondents were assigned as an early phase respondent.
group and the last forty respondents were identified as a late phase respondent group. The early and late phases of responders were determined based on the day and time their questionnaire was submitted. An independent $t$-test was conducted to determine if group mean for total scores on the four measured constructs differed between two group respondents (early and late). The results of the independent samples $t$-test (alpha level of .05, two tailed) for equality of means on scale scores of constructs between early and late is presented in Table 3.3. Significant mean differences would indicate a difference between early and late respondents. The results showed there were not statistically significant differences between early and late respondents who provided data for the measures of employee turnover intention, job satisfaction, satisfaction with supervisor, and organizational commitment. These findings suggest that data collected from Extension program assistants were representative of the entire study population (Table 3.4).

Table 3.4
Independent Samples $t$-test for Equality of Means on Scale Scores of Constructs between Early and Late Respondents.

<table>
<thead>
<tr>
<th>Scale</th>
<th>Early</th>
<th>Late</th>
<th>$t$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turnover Intention</td>
<td>3.91</td>
<td>3.70</td>
<td>0.43</td>
<td>0.66</td>
</tr>
<tr>
<td>Job Satisfaction</td>
<td>3.74</td>
<td>3.90</td>
<td>-1.12</td>
<td>0.27</td>
</tr>
<tr>
<td>Satisfaction with Supervisor</td>
<td>3.65</td>
<td>3.86</td>
<td>-0.94</td>
<td>0.35</td>
</tr>
<tr>
<td>Organizational Commitment</td>
<td>5.31</td>
<td>5.61</td>
<td>-1.07</td>
<td>0.29</td>
</tr>
</tbody>
</table>
**Sampling Error**

Dillman (1991) wrote that a sampling error occurs because of heterogeneity among members of the population. OSU Extension program assistants represented the self-identified group of people who participated in this study. The sampling error was minimized because Extension employees voluntarily participated in the study with an equal chance to complete the questionnaire. According to Dillman (1991) this study of all OSU Extension program assistants was a census that avoided the non-coverage error.

**Summary**

This chapter reviewed the methods and procedures utilized in this descriptive–exploratory and correlational study to describe the relationships between independent variables such as demographics, job satisfaction, satisfaction with supervisor, organizational commitment and a dependent variable turnover intention. The following Chapter 4 presents the results using the data analysis techniques described in this chapter.
Chapter 4 Results

The purpose of this study was to investigate the influence of demographics, job satisfaction, satisfaction with supervisor, and organizational commitment on turnover intention for Extension program assistants in Ohio. Chapter 4 starts with a description of the demographic characteristics of the population in this study and a summary of the descriptive statistics for other key variables including job satisfaction, satisfaction with supervisor, organizational commitment, and turnover intention. The remaining sections share results, organized by the four research questions guiding this study.

Descriptive Statistics for Key Variables

Demographic Characteristics of OSU Extension Program Assistants

The study’s population was 182 Ohio State University (OSU) Extension program assistants with a full-time appointment. The overall response rate was 84% (n = 153). After cleaning responses with missing data, the final data set included responses from 149 employees that represented an 81.8% response rate. A majority of the participants were married female with a bachelor’s degree, who worked at OSU Extension approximately six years. More than 30% of respondents had children under 18 who lived at home. The full results of the descriptive statistics for the demographic variables are presented in Table 4.1. For the summary purpose only frequency distribution for two
continuous variables for age and years of service were grouped. However, all further analysis used both these variables as continuous data.

Table 4.1
Summary of Demographic Variables

<table>
<thead>
<tr>
<th>Item</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>140</td>
<td></td>
</tr>
<tr>
<td>( M ) (43.10)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>( SD ) (14.13)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21 – 30</td>
<td>47</td>
<td>34.1</td>
</tr>
<tr>
<td>31 – 40</td>
<td>23</td>
<td>16.6</td>
</tr>
<tr>
<td>41 -50</td>
<td>25</td>
<td>18.1</td>
</tr>
<tr>
<td>51 -60</td>
<td>31</td>
<td>22.5</td>
</tr>
<tr>
<td>61 -70</td>
<td>12</td>
<td>8.7</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>130</td>
<td>87.4</td>
</tr>
<tr>
<td>Male</td>
<td>17</td>
<td>11.6</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High school diploma</td>
<td>5</td>
<td>3.4</td>
</tr>
<tr>
<td>Some colleges, no degree</td>
<td>21</td>
<td>14.3</td>
</tr>
<tr>
<td>Associate’s Degree</td>
<td>20</td>
<td>13.6</td>
</tr>
<tr>
<td>Bachelor’s Degree</td>
<td>83</td>
<td>55.5</td>
</tr>
<tr>
<td>Master’s Degree</td>
<td>18</td>
<td>12.2</td>
</tr>
<tr>
<td>Marital status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>41</td>
<td>27.9</td>
</tr>
<tr>
<td>Married</td>
<td>94</td>
<td>63.9</td>
</tr>
<tr>
<td>Divorced</td>
<td>6</td>
<td>4.1</td>
</tr>
<tr>
<td>Widowed</td>
<td>3</td>
<td>2.1</td>
</tr>
<tr>
<td>Domestic partner</td>
<td>3</td>
<td>2.0</td>
</tr>
<tr>
<td>Children leaving at home under age 18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>48</td>
<td>32.7</td>
</tr>
<tr>
<td>No</td>
<td>99</td>
<td>67.3</td>
</tr>
<tr>
<td>Years of service to OSU</td>
<td>146</td>
<td></td>
</tr>
<tr>
<td>( M ) (6.31)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>( SD ) (7.87)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0 – 5</td>
<td>97</td>
<td>34.1</td>
</tr>
<tr>
<td>6 – 10</td>
<td>14</td>
<td>10.1</td>
</tr>
<tr>
<td>11 – 15</td>
<td>4</td>
<td>2.9</td>
</tr>
<tr>
<td>16 -20</td>
<td>10</td>
<td>7.2</td>
</tr>
<tr>
<td>21 -25</td>
<td>9</td>
<td>6.5</td>
</tr>
<tr>
<td>26 -30</td>
<td>3</td>
<td>2.2</td>
</tr>
<tr>
<td>31 -35</td>
<td>1</td>
<td>0.7</td>
</tr>
<tr>
<td>Program area</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agricultural and Natural Resources</td>
<td>8</td>
<td>5.4</td>
</tr>
<tr>
<td>4-H Youth Development</td>
<td>28</td>
<td>18.9</td>
</tr>
<tr>
<td>Family and Consumer Science</td>
<td>93</td>
<td>62.4</td>
</tr>
<tr>
<td>Other</td>
<td>19</td>
<td>12.8</td>
</tr>
</tbody>
</table>
These 149 OSU Extension program assistants had a mean age of 41.3 years (SD = 14.1). Ages ranged from 22 to 72 years. The distribution of ages is symmetrical with a low positive skew (.23) and indicates a longer right tail (toward higher values). A kurtosis of -1.32 explained the flatter shape of the distribution. A majority of the respondents were female 87% (n = 130) compared to male 11.6% (n = 17). More than half of the respondents, 55.5%, (n = 83), had earned a bachelor’s degree. Among them, 12.2% (n = 18) also held a master’s degree. A similar percentage of respondents held an Associate’s degree 13.6% (n = 20) as those with some college but no degree (14.3%, n = 21%). The remaining 3.4% (n = 5) held a high school diploma (including equivalency).

As for marital status, 63.9% (n = 94) of respondents indicated as married while 27.9% (n = 41) were single. The remaining 4.1% (n = 6) indicated as divorced, 2.1% (n = 3) as widowed, and 2% (n = 3) had a domestic partner. Slightly more than thirty percent of program assistants (32.9%, n = 48) had children under 18 who are living at home. Sixty-seven percent of respondents did not have children under 18. The mean number of years a program assistant was employed by OSU Extension was 6.31 (SD = 7.87) and ranged from three months to 32 years. Respondents were not equally distributed across program areas: Agriculture and Natural Resources was 5.4% (n = 8), 4-H Youth Development was 18.9% (n = 28), and Family and Consumer Science was 62.4% (n = 93). There were no respondents from the Community Development program area. Approximately thirteen percent (12.8%, n = 19) of respondents were not affiliated with any program areas; a majority of this group of employees represented program assistants who worked on the state level.
Job Satisfaction

Data for job satisfaction was collected the 32-item Spector’s Job Satisfaction Survey (JSS). The JSS is copyright © 1994, Paul E. Spector, All rights reserved. Respondents were asked to report feelings and perceptions on eight sub-constructs of job satisfaction using a six point Likert-type scale (1 = disagree very much to 6 = agree very much). The total job satisfaction scores were comprised of eight subscale scores that measured satisfaction with pay, promotion, fringe benefits, rewards, operational procedures, co-workers, work, and communication. Higher values on the job satisfaction score indicates agreement with higher job satisfaction.

Table 4.2
Descriptive Statistics of Job Satisfaction’s Subscale Scores

<table>
<thead>
<tr>
<th>Variable</th>
<th>n</th>
<th>M</th>
<th>SD</th>
<th>Skew</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfaction with pay</td>
<td>137</td>
<td>2.44</td>
<td>1.15</td>
<td>0.60</td>
<td>1.00</td>
<td>5.50</td>
</tr>
<tr>
<td>Satisfaction with promotion</td>
<td>119</td>
<td>2.37</td>
<td>1.03</td>
<td>0.060</td>
<td>1.00</td>
<td>5.25</td>
</tr>
<tr>
<td>Satisfaction with fringe benefits</td>
<td>122</td>
<td>4.71</td>
<td>0.84</td>
<td>-0.39</td>
<td>2.25</td>
<td>6.00</td>
</tr>
<tr>
<td>Satisfaction with rewards</td>
<td>126</td>
<td>3.63</td>
<td>1.15</td>
<td>-0.48</td>
<td>1.00</td>
<td>6.00</td>
</tr>
<tr>
<td>Satisfaction with operational procedure</td>
<td>137</td>
<td>3.54</td>
<td>0.84</td>
<td>-0.32</td>
<td>1.25</td>
<td>5.50</td>
</tr>
<tr>
<td>Satisfaction with co-workers</td>
<td>138</td>
<td>5.08</td>
<td>0.93</td>
<td>-0.97</td>
<td>2.25</td>
<td>6.00</td>
</tr>
<tr>
<td>Satisfaction with work</td>
<td>146</td>
<td>5.03</td>
<td>0.85</td>
<td>-1.27</td>
<td>1.00</td>
<td>6.00</td>
</tr>
<tr>
<td>Satisfaction with communication</td>
<td>135</td>
<td>4.1</td>
<td>0.98</td>
<td>-0.41</td>
<td>1.50</td>
<td>6.00</td>
</tr>
<tr>
<td>Overall satisfaction with job</td>
<td>149</td>
<td>3.90</td>
<td>0.66</td>
<td>-0.41</td>
<td>2.04</td>
<td>5.42</td>
</tr>
</tbody>
</table>

Satisfaction with Supervisor

Data for satisfaction with supervisor was collected utilizing the 18-item scale ‘The Satisfaction With My Supervisor Scale’ (SWMSS) developed by Scarpello &
Vandenberg (1987) and based on a five-point Likert-type scale. Respondents were asked to report feelings and perceptions on their immediate supervisor. Higher values on the satisfaction with supervisor score indicates agreement with higher satisfaction with supervisor. The mean summative score on satisfaction with supervisor was 3.88 (SD = .94, n = 149). Scores ranged from 1 (very dissatisfied) to 5 (very satisfied). The distribution of the satisfaction with supervisor scores had a high negative skew (-1.01) showing a long left tail toward lower values.

**Organizational Commitment**

Data for organizational commitment was collected utilizing the 9-item scale ‘Organizational Commitment Questionnaire’ (OCQ) developed by Mowday, Scarpello, and Porter (1979). Respondents were asked to report feelings and perceptions on organizational commitment using a seven-point Likert-type scale. Higher values on the organizational commitment score indicate higher agreement with statements about organizational commitment. The mean summative score on organizational commitment was 5.45 (SD = 1.17, n = 149). Scores ranged from 1 (strongly disagree) to 7 (strongly agree). The distribution of organizational commitment scores had a high negative skew (-1.01) and show a long left tail toward lower values.

**Turnover Intention**

Data for turnover intention was collected utilizing the 3-item scale ‘The Michigan Organizational Assessment Questionnaire’ (MOAQ) developed by Cammann, Fichman, Jenkins, & Klesh, (1979). Respondents were asked to provide their perception, feelings, and thoughts related to the employee’s current position within OSU Extension and the
Extension Organization in general using a seven-point Likert-type scale (1 = strongly disagree to 7 = strongly agree). Higher values on the turnover intention score indicates higher agreement with statements about turnover intention. The mean summative score for turnover intention was 3.71 (SD = 2.05, n = 143). Scores ranged from 1 to 7 (minimum to maximum scores).

**Findings for Research Question 1**

Research Question 1 was: What is the relationship between employee turnover intention and selected demographics such as age, gender, degree level, program areas, marital status, children living at home, and number of years working in organization?

Intention to turnover was measured by the following three-item scale: (1) “How likely is it that you will actively look for a new job in the next year; (2) “I often think about leaving the organization”; and (3) “I will probably look for a new job in the next year” (Cammann et al., 1979). Responses to each item were measured on a 1-7 rating Likert scale labeled: 1 = strongly disagree, 2 = disagree, 3 = slightly disagree, 4 = neither agree nor disagree, 5 = slightly agree, 6 = agree, and 7 = strongly agree. The turnover intention variable was recoded from a 1-7 rating Likert scale into a three point Likert-type scale (1 = disagree; 2 = neither agree nor disagree, undecided; 3 = agree). A chi-squared test of independence showed that there was no association between OSU Extension program assistants’ turnover intention and gender, level of education, marital status, children living at home under 18, and program areas. All five variables are independent from turnover intention (see Table 4.3).
Table 4.3  
Chi-Square Analysis on Association between Turnover Intention and Selected Demographic Variables: Gender, Level of Education, Marital Status, Children Living at Home, and Program Areas

<table>
<thead>
<tr>
<th>Demographic Factors</th>
<th>n</th>
<th>$\chi^2$</th>
<th>df</th>
<th>$p^*$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>141</td>
<td>2.833</td>
<td>2</td>
<td>.243</td>
</tr>
<tr>
<td>Level of education</td>
<td>141</td>
<td>14.399</td>
<td>8</td>
<td>.072</td>
</tr>
<tr>
<td>Marital status</td>
<td>141</td>
<td>13.191</td>
<td>8</td>
<td>.105</td>
</tr>
<tr>
<td>Children living at home under 18</td>
<td>141</td>
<td>1.789</td>
<td>2</td>
<td>.407</td>
</tr>
<tr>
<td>Program areas</td>
<td>142</td>
<td>7.303</td>
<td>6</td>
<td>.294</td>
</tr>
</tbody>
</table>

Note: $p < .05$

The null hypothesis that gender is independent of turnover intention is retained at .05 level ($\chi^2 (2, n = 141) = 2.833; p = .243$). The association of level of education and turnover intention is non-significant ($\chi^2 (8, n = 141) = 14.399; p = .072$). The association between marital status and turnover intention is not significant ($\chi^2 (8, n = 141) = 13.191; p = .105$). The null hypothesis that children under the age of 18 living at home is independent of turnover intention is retained at .05 level ($\chi^2 (2, n = 141) = 1.789; p = .407$). The association of employee program area and turnover intention is non-significant ($\chi^2 (6, N = 142) = 7.303; p = .294$).

The age and years of service were significant predictors of OSU Extension program assistants’ turnover intention. A linear regression analysis was used to describe the relationship between turnover intention and age. A simple linear regression model with only age as a predictor shows that age is significant in predicting turnover intention. The coefficient is estimated to be 0.043 with a significant p-value (<0.001) based on the t
statistics. The coefficient estimate indicates that each unit increase in age associates with an estimated turnover intention decrease of 0.043 units. However, age only explains 8.2% of the variation in turnover intention ($R^2 = .082$) and there is still much unexplained variation after fitting this model. Negative moderate association was found between turnover intention and age ($r = -.30$, $p < .001$). Two diagnostic tests: Tolerance and VIF (Variance Inflation Factor), were used to assess multicollinearity. The tolerance statistics for turnover intention value was 1.000 and the value for VIF was 1.000 which indicated a low or moderate correlation among predictors (Lomax & Hahs-Vaughn, 2012). Both of these tests showed that multicollinearity was not a problem in these statistical tests.

A review of the residual statistics showed no violation of the linear multiple regression assumptions. Standardized residuals were below 3.0 and ranged from -1.750 to 2.089. A frequency histogram of standardized residuals showed a normal distribution with a mean of zero (Figure 4.1). Skewness (.229) and kurtosis (-1.325) statistics also suggest that normality was a reasonable assumption. The normal probability plot of observed and expected residuals showed that all residuals fell in a straight line with acceptable variation (Figure 4.2). The sample size was an adequate 1:134 based on the ratio of number of independent variables to sample size ($n = 134$) in this analysis.
A linear regression analysis was used to describe the relationship between turnover intention and continuous variable years of service. A simple linear regression model with only years of service as a predictor shows that years of service is significant.
in predicting turnover intention. The coefficient is estimated to be -0.064 with a significant p-value (p = 0.003) based on the t statistics. The coefficient estimate indicates that for each unit increase in years of service that turnover intention is estimated to decrease by 0.064 units. However, years of service only explains 6.2% of the variation in turnover intention ($R^2 = 0.062$) and there is still much unexplained variation after fitting this model. Low negative association was found between years of service and turnover intention ($r = .249, p < .001$). Two diagnostic tests: Tolerance and VIF (Variance Inflation Factor), helped to assess multicollinearity. The tolerance statistics for turnover intention value was 1.000. The variance inflation factor was 1.000 which indicated a low or moderate correlation among predictors (Lomax & Hahs-Vaughn, 2012). Both of these tests showed that multicollinearity was not a problem in these statistical tests.

A review of the residual statistics indicated no violation of the linear multiple regression assumptions. Standardized residuals were below 3.0 and ranged from -1.536 to 1.877. A frequency histogram of standardized residuals showed a normal distribution with a mean of zero (Figure 4.3). Skewness (1.528) and kurtosis (1.254) statistics also suggested that normality was a reasonable assumption. The normal probability plot of observed and expected residuals showed that all residuals fell in a straight line with acceptable variation (Figure 4.4). The sample size was an adequate 1:134 based on the ratio of number of independent variables to sample size ($n = 134$) in this analysis.
Figure 4.3 Standardized Residuals Histogram, Dependent Variable: Turnover Intention

Figure 4.4 Normal P-P Plot of Regression Standardized Residuals: Dependent Variable: Turnover Intention
Bivariate correlations analysis was used to confirm the relationship among turnover intention, age, years of service, gender, children living at home under 18, education, program areas, and marital status. Based on the variables’ level of measurement correlation coefficients were calculated Pearson’ product-moment correlation coefficients, Spearman rank-order correlations, Phi and Cramer’s V correlations (see appendix I for a complete correlation matrix). The correlation analysis confirmed that age and years of services were negatively correlate to employees’ turnover intention. Demographic variables namely, gender, children living at home under 18, education, program areas, and marital status had no significant correlation with turnover intention.

**Findings for Research Question 2**

Research Question 2 was: What is the relationship between turnover intention and the independent variables of organizational commitment, job satisfaction, and satisfaction with supervisor?

The results of the Pearson correlation among variables of interest showed a substantial negative association between job satisfaction and turnover intention (-.60), and between organizational commitment and turnover intention (-.58). A moderate negative association was found between satisfaction with supervisor and turnover intention (-.48). A very strong positive association (.70) was found between job satisfaction and satisfaction with supervisor. Davis (1991) conventions were used to describe the magnitude of linear relationship between variables (Table 4.4).
Table 4.4
Bivariate Correlation Matrix Among Job Satisfaction, Satisfaction with Supervisor, Organizational Commitment, and Turnover Intention

<table>
<thead>
<tr>
<th>Measure</th>
<th>Job Satisfaction</th>
<th>Satisfaction with Supervisor</th>
<th>Organizational Commitment</th>
<th>Turnover Intention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job Satisfaction</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Satisfaction with Supervisor</td>
<td>.703* (n = 149)</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Organizational Commitment</td>
<td>.666* (n = 149)</td>
<td>.625* (n = 149)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Turnover Intention</td>
<td>-.600* (n = 143)</td>
<td>-.482* (n = 143)</td>
<td>-.584* (n = 143)</td>
<td>-</td>
</tr>
</tbody>
</table>

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

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

**Findings for Research Question 3**

Research Question 3 was: To what extent does satisfaction with supervisor predict employee turnover intention—controlling for age and years of service?

Multiple regression analysis with hierarchical entry was used to determine if satisfaction with supervisor explained a significant proportion of the variance associated with the OSU Extension program assistants’ turnover intention (while controlling for demographics such as age and years of service). Data analysis was conducted using SPSS version 24 to answer this research question and examine assumptions of multiple regression (Lomax & Hahs-Vaughn, 2012). The dependent variable was turnover intention. The primary independent variable was satisfaction with supervisor. Controlled variables were demographic variables: age and years of service. Overall, results from the
multiple hierarchical regression analysis indicated that increasing satisfaction with supervisor decreases OSU Extension program assistants’ turnover intention.

Model 1 of the regression equation used controlling variables (age and years of service) to test if these two demographic variables significantly predicted the employee turnover intention. The results of the first model indicated that employee’s age and years of service explained 9.4% ($R^2 = .094$) of the proportion of variance in the turnover intention for change ($F = 6.78, (2,131), p = .002$). In Model 2 (full model), satisfaction with supervisor was added as an independent variable in the regression equation. The results of the full model revealed an additional 20.3% of explained variance ($R^2$ change $= .203$) of the proportion of variance in employee turnover intention ($F = 37.64 (1,130) p < .001$). Collectively, age, years of service, and satisfaction with supervisor variables accounted for 29.7% ($R^2 = .297; F = 18.324 (3,130) p < .001$) of the variance in turnover intention (Table 4.5).

Table 4.5
Multiple Linear Regression Analysis of Satisfaction with Supervisor and Turnover Intention of OSU Extension Program Assistants’ While Controlling Age and Years of Service

<table>
<thead>
<tr>
<th>Model Fit with Hierarchical Entry</th>
<th>Change Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$R$</td>
</tr>
<tr>
<td>1$^a$</td>
<td>.306</td>
</tr>
<tr>
<td>2$^b$</td>
<td>.545</td>
</tr>
</tbody>
</table>

a. Predictors: Years of service and age
b. Predictors: Years of service, age, and satisfaction with supervisor
Coefficient estimates in this model indicate that satisfaction with supervisor is a significant predictor (-.991, t = -6.135, p < .001) when controlling for age and years of service. For each unit increase in satisfaction with supervisor, turnover intention is estimated to decrease by 0.991 units. For each unit increase in age, turnover intention is estimated to decrease by 0.026 units. However, the effect of age is not significant based on the t statistics (p = 0.059). Similarly, for each unit increase in years of service, turnover intention is estimated to decrease by 0.042 unit. But, the effect is not significant (p = 0.090) (Table 4.6).

Table 4.6
Regression Coefficients and Collinearity Statistics of Turnover Intention on Satisfaction with Supervisor and Selected Control Variables Age and Years of Service

<table>
<thead>
<tr>
<th>Full Model/ Model 2</th>
<th>Unstandardized Coefficient</th>
<th>Standardized Coefficient</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std..Error</td>
<td>Beta</td>
</tr>
<tr>
<td>Constant</td>
<td>8.885</td>
<td>.783</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>-.026</td>
<td>.014</td>
<td>-.183</td>
</tr>
<tr>
<td>Years of Service</td>
<td>-.042</td>
<td>.025</td>
<td>-.164</td>
</tr>
<tr>
<td>Satisfaction with supervisor</td>
<td>-.991</td>
<td>.162</td>
<td>-.455</td>
</tr>
</tbody>
</table>

Two diagnostic tests: Tolerance and VIF (Variance Inflation Factor) were used to assess multicollinearity. The tolerance statistics in the full model for turnover intention (Table 4.5) were greater than .50 across all independent variables and varied from .558 to .984. VIF ranged from 1.016 to 1.712 which indicated moderate correlation among predictors (Lomax & Hahs-Vaughn, 2012). Both of these tests indicated that multicollinearity was not a problem. A review of the residuals indicated no violation of
the linear multiple regression assumptions. Standardized residuals were below 3.0 and ranged from -2.151 to 2.146. A frequency histogram of standardized residuals showed a normal distribution with a mean of zero (Figure 4.5). The normal probability plot of observed and expected residuals showed that all residuals fell in a straight line with acceptable variation (Figure 4.6). The sample size was an adequate 1:67 based on the ratio of number of independent variables to sample size (n = 134) in this analysis.

Figure 4.5 Standardized Residuals Histogram, Dependent Variable: Turnover Intention

Figure 4.6 Normal P-P Plot of Regression Standardized Residuals: Dependent Variable: Turnover Intention
Increasing satisfaction with supervisor decreases OSU Extension program assistants’ turnover intention. OSU Extension program assistant’s satisfaction with supervisor explains a significant proportion of variance (20.3%) in employee turnover intention (while controlling for age and years of service).

**Findings for Research Question 4**

Research Question 4 was: To what extent does organizational commitment and satisfaction with supervisor mediate the relationships between job satisfaction and turnover intention?

Baron and Kenny (1986) described a mediator as a variable “to the extent that it accounts for the relation between the predictor and the criterion” (p.1176). For this analysis, the Preacher and Hayes (2004) bootstrap method, a non-parametric resampling test with no assumption about the shape of the distribution, was used to determine mediation effect. According to Preacher’s and Hayes’s (2004) there are three conditions that need to be met to conclude that the mediation effect exists: (1) independent variable significantly predicts dependent variable; (2) independent variable predicts mediating variable, and (3) mediating variable predicts dependent variable, while controlling for the independent variable. The Sobel (1982) test was used to explore the statistical significance of the two mediators (organizational commitment and satisfaction with supervisor). The indirect effect was utilized in a bootstrap estimation approach with 5000 samples.
Mediation Effect of Organizational Commitment

Hayes SOBEL analysis was used to investigate the hypothesis that organizational commitment mediates the effect of job satisfaction on turnover intention. The results showed that organizational commitment mediates the effect of job satisfaction on turnover intention. Approximately 28% of the variance in turnover intention was accounted for by organizational commitment ($R^2 = .282$).

In this model (Figure 4.7) the mediation effect of organizational commitment on the relationship between job satisfaction and turnover intention was examined, where TI = Turnover Intention (Dependent Variable); JS = Job Satisfaction (Independent Variable), and OC = Organizational Commitment (Mediator).

Figure 4.7 Path Model for Estimating Mediation Effect of Organizational Commitment (OC) on Relationship between Job Satisfaction (JS) and Turnover Intention (TI) (on the basis of Baron & Kenny, 1986)
Results of the Person correlation showed job satisfaction had a substantial negative association with turnover intention ($r = -.60, p < .01$) and a substantial positive association with organizational commitment ($r = .67, p < .01$). Organizational commitment had a moderate negative association with turnover intention ($r = -.58, p < .01$). The mediation analysis utilized the Hayes SOBEL and results showed below ($n = 143$).

1. JS had a total direct effect on TI that was statistically different from zero ($B = -1.81, p < .0001$; $e$-path in Figure 4.7)

2. JS had a direct effect on OC that was statistically different from zero ($B = 1.17, p < .0001$; $a$ path in Figure 4.7)

3. OC had an effect on TI, while controlling the effects of JS, that was statistically significant ($B = -.57, p = .0002$, $b$-path in Figure 4.7)

4. Controlling the effects of OC, JS had a direct effect on TI that was statistically different from zero ($B = -1.14, p < .0001$, $e'$ in Figure 4.7). This indicates that organization commitment partially mediates the relationship between job satisfaction and turnover intention.

5. The Hayes SOBEL test helped estimate the indirect effects JS had on TI through OC ($Z = -3.54, p = .0004$). The true indirect effect was estimated to lie between .1814 and .3905, and was statistically significant with a 95% confidence (Figure 4.7).
**Mediation Effect of Satisfaction with Supervisor**

Hayes SOBEL analysis was used to investigate the hypothesis that satisfaction with supervisor mediates the effect of job satisfaction on turnover intention. The results showed that satisfaction with supervisor does not mediate the relationship between job satisfaction and turnover intention. In this model the mediation effect of satisfaction with supervisor on the relationship between job satisfaction and turnover intention was examined, where TI = Turnover Intention (Dependent Variable); JS = Job Satisfaction (Independent Variable), and SWS = Satisfaction with Supervisor (Mediator).

![Path Model](image)

Figure 4.8 Path Model for Estimating Mediation Effect of Satisfaction with Supervisor (SWS) on Relationship between Job Satisfaction (JS) and Turnover Intention (TI) (on the basis of Baron & Kenny, 1986)

Results of the Person correlation showed job satisfaction had a substantial negative association with turnover intention ($r = -.60$, $p < .01$) and a high positive
association with satisfaction with supervisor (r = .70, p < .01). Satisfaction with
supervisor had a moderate negative association with turnover intention (r = -.48, p < .01).
The mediation analysis utilized the Hayes SOBEL and results showed below (n = 143).

1. JS had a total direct effect on TI that was statistically different from zero (B = -
1.81, p < .0001; e-path in Figure 4.7)
2. JS had a direct effect on SWS that was statistically different from zero (B = .98, p < .0001; a path in Figure 4.7)
3. SWS had an effect on TI, while controlling the effects of JS, that was not
statistically significant (B = -.25, p = .2110, b -path in Figure 4.8). This indicates
that Satisfaction with supervisor does not mediate the relationship between job
satisfaction and turnover intention. There is no needs to continue the analysis,
however the result of the Hayes Sobel test confirmed the results that was
represented above
4. The Hayes SOBEL test helped estimate the indirect effects JS had on TI through
SWS (Z = -1.24, p = .2131). The true indirect effect was estimated to lie between
-1.2451 and .2131 with a 95% confidence interval and was not statistically
significant (Figure 4.8).

The results showed that satisfaction with supervisor does not mediate the effect of job
satisfaction on turnover intention.
Summary

The results in Chapter 4 were organized by demographic statistics for key variables, followed by findings for each of the four questions guiding this research. A summary of key findings includes:

1. OSU Extension program assistants’ turnover intention was not associated with employee’s gender, level of education, marital status, children living at home, or program areas. However, age and years of service were negatively related to employee turnover intention. The variable age explained a small amount of the variance (8.2%) in employee turnover intention. The variable years of service was explained 6.2% of the variance in employee turnover intention.

2. OSU Extension program assistants’ turnover intentions were negatively related to their job satisfaction, satisfaction with supervisor, and organizational commitment.

3. A high proportion of variance (20.3%) is significantly associated with satisfaction with supervisor after controlling for the effect age and years of service. Increasing satisfaction with supervisor decreases OSU Extension program assistants’ turnover intention.

4. Organizational commitment mediated the effect between job satisfaction and turnover intention. Satisfaction with supervisor does not mediate the relationship between job satisfaction and turnover intention.

A detailed discussion of findings is presented in the next chapter.
Chapter 5 Summary and Discussion

As an aid to the reader, Chapter 5 restates the research problem and reviews the methodology used in this research. Results are summarized and discussed. The discussion also provides recommendations for both human resource management practice and future research.

Research Problem and Review of Methods

Employee turnover and turnover intention are key indicators in human resource management and relative to overall effectiveness of organizational leadership (Guzzo & Dickson, 1996; Koys, 2001). Safrit and Owen (2010) emphasized that Cooperative Extension has experienced employee turnover and retention issues for more than two decades and that turnover is a chronic challenge for Extension systems nationwide. The results of previous research identified many factors related to employees’ turnover and turnover intention, namely heavy work load, burnout, occupational stress, balancing work and family life, low salary, work hours, late night meetings, lack of recognition, high requirements for advancement, organizational commitment, job satisfaction, organizational justice, and other factors (Clark, 1981; Clark, Norland, & Smith, 1992; Ensle, 2005; Harder, Gouldthorpe, & Goodwin, 2015; Holtom, Mitchell, Lee, & Eberly, 2005; Kutilek, 2000; Kutilek et.al., 2008; Rousan & Henderson, 1996; Sears Jr, Urizar Jr,
Almost all Cooperative Extension employees’ turnover studies investigated Extension agents, called educators in some states, as a subject of study; however, there is no research that examines turnover intention among Extension program assistants who provide teaching services. Employees in different job categories are more likely to pursue their decision to quit a job differently (Lee and Mitchell, 1994). Ohio State University Extension program assistants represent a large proportion of the educational programming delivered by the organization. In OSU Extension, there are 367 full-time Extension educators and program assistants with almost 50% in the program assistant job classification. It is important to examine Extension program assistants’ turnover because they could pursue their decision to leave a job differently compared to Extension educators.

The purpose of this study was to investigate the influence of demographics, job satisfaction, satisfaction with supervisor, and organizational commitment on turnover intention for Extension program assistants. Four research questions guided this study:

1. What is the relationship between employee turnover intention and selected demographics such as age, gender, degree level, program areas, marital status, children living at home, and number of years working in the organization?

2. What is the relationship between turnover intention and the independent variables organizational commitment, job satisfaction, and satisfaction with supervisor?
3. To what extent does satisfaction with supervisor predict employee turnover intention controlling for age and years of service?

4. To what extent do organizational commitment and satisfaction with supervisor mediate the relationships between job satisfaction and turnover intention?

The quantitative research methodology was based on the descriptive–exploratory study and correlational research design. An online survey was used in this study. The research design helped the researcher to describe the population of this study with respect to a dependent variable and a set of independent variables. Turnover intention was the dependent variable of interest in this research. Organizational commitment, job satisfaction, satisfaction with supervisor, and demographics were four independent variables investigated in this study.

The target population for the study was Cooperative Extension employees, specifically Extension program assistants. The accessible population represented a sample of all (182 full-time) Extension program assistants in Ohio who were employed as of November 23, 2016. Data were collected from Extension program assistants in the state of Ohio using a 68-item online survey. The questionnaire included items from the Job Satisfaction Survey (Spector, 1985), The Satisfaction With My Supervisor Scale (Scarpello & Vandenberg, 1987), the Organizational Commitment Questionnaire (Mowday, Steers, & Porter, 1979), the Turnover Intention from The Michigan Organizational Assessment Questionnaire (Cammann, Fichman, Jenkins & Klesh, 1987).
OSU Extension program assistants voluntarily participated in the turnover intention study by completing the online survey. The questionnaire was sent to 182 individuals. The overall response rate was 84% (n = 153) and the final data set represented an 81.8% (n = 149) response rate for usable data. Non-response biases were examined by comparing early and late responses. There were no significant differences found between the first 40 and last 40 responses (Miller & Smith, 1983). Survey data were analyzed using descriptive statistics, chi-squared test of independence, Pearson correlation, binary linear regression, hierarchical multiple regression approach, and Hayes Sobel test.

Before discussing results, it is important to mention the limitations of this study that suggest caution when interpreting the findings. The results of the Extension program assistants’ turnover intention cannot be generalized to all Extension program assistants across the states because a state census approach was utilized. Local specifics and unique differences exist in Cooperative Extension organizations.

Summary of the Findings

This section summarizes the results that were provided in Chapter 4. Findings are summarized for each research question.

Research Question 1

The first research question was: What is the relationship between employee turnover intention and selected demographics such as age, gender, degree level, program
areas, marital status, children living at home, and number of years working in the organization? Two demographic variables, age and years of service, were significant predictors of turnover intention. Negative moderate association was found between turnover intention and employee age \((r = -\.30, p < .001)\) where age explained 8.2% of the variation in turnover intention. Low negative association was found between years of service and turnover intention \((r = -\.249, p < .001)\) where years of service explained 6.2% of the variation in turnover intention. No significant association was found between OSU Extension program assistant turnover intention and the following demographic factors: gender, level of education, marital status, children living at home, and program area.

**Research Question 2**

The second research question was: What is the relationship between turnover intention and the independent variables organizational commitment, job satisfaction, and satisfaction with supervisor? A substantial negative association was found between turnover intention and job satisfaction \((r = -\.60, p < .001)\). A moderate negative association was found between satisfaction with supervisor and turnover intention \((r = -\.48, p < .001)\). A substantial negative association was found between organizational commitment and turnover intention \((r = -\.58, p < .001)\).

**Research Question 3**

The third research question was: To what extent does satisfaction with supervisor predict employee turnover intention—controlling for age and years of service? Satisfaction with supervisor among OSU Extension program assistants explained a significant proportion of variance (20.3%) in employee turnover intention while
controlling for age and years of service. However, in the final regression model, age and years of service were not significant predictors. Higher satisfaction with supervisor tended to decrease OSU Extension program assistants’ turnover intention.

**Research Question 4**

The fourth research question was: To what extent do organizational commitment and satisfaction with supervisor mediate the relationships between job satisfaction and turnover intention? The results suggested that organizational commitment mediated the relationship between job satisfaction and turnover intention. Results also suggested that satisfaction with supervisor did not mediate the relationship between job satisfaction and turnover intention.

**Discussion**

This section will cover conclusions and researcher insights overall and then more in-depth related to five key findings that related to the major variables and research questions. Recommendations for practice and suggestions for future research are also addressed.

**Conclusions and Researcher Insights**

The purpose of this study was to investigate the influence of demographics, job satisfaction, satisfaction with supervisor, and organizational commitment on turnover intention for Ohio State University Extension program assistants. The conceptual model presented in Chapter 2 (Figure 2.11) illustrated a potential relationship among variables of interest in this study.
The findings from this study and the proposed conceptual and theoretical framework contribute to an integrative theory of employee turnover intention and turnover. The conceptual model in this study provided the framework for exploring employee turnover intention (see Figure 2.11). Returning to the research questions provided earlier in the chapter, this study found a number of distinct predictors for Extension program assistants’ turnover intention. Job satisfaction, satisfaction with supervisor, organizational commitment, employee’s age and years of service were important in understanding and predicting OSU Extension program assistants’ turnover intention. The combined instruments helped to assess 149 full-time OSU Extension program assistants’ perceptions, feelings, and attitudes toward turnover intention.

Summarizing, the following were key findings based on the results of the four research questions that guided this study:

1. OSU Extension program assistants’ gender, marital status, level of education, children living at home under 18, and program areas did not have a significant association with turnover intention. There were two demographic variables that significantly predicted OSU Extension program assistants’ turnover intention namely, age and years of services. A low proportion of variances in age (8.2%) and years in service (6.2%) explained employees’ turnover intention. Given these points, it was concluded that younger OSU Extension program assistants and those who had less years of service tended to have higher turnover intention.
2. OSU Extension program assistants’ job satisfaction, satisfaction with supervisor, and organizational commitment were important predictors of employees’ turnover intention. Given these points, it was concluded:

- Higher level of organizational commitment tended to lower turnover intention among OSU Extension program assistants.
- Higher job satisfaction tended to lower turnover intention among OSU Extension program assistants.
- Higher satisfaction with supervisor tended to lower turnover intention among OSU Extension program assistants.

3. Satisfaction with supervisor is a significant predictor of OSU Extension program assistant’s turnover intention. Satisfaction with supervisor explains a significant proportion of variance (20.3%) in employee turnover (after controlling for the effect of age and years of service). Both age and years of service were not significant in the final model. Given these points, it was concluded that increasing satisfaction with supervisor decreases OSU Extension program assistants’ turnover intention.

4. The results of this study offer evidence that organizational commitment does mediate the effect of employee job satisfaction and turnover intention among OSU Extension. Approximately 28% of the variance in turnover intention was accounted for by organizational commitment. Given these points, it was concluded that OSU Extension program assistants’ turnover intention was significantly impacted by organizational commitment. It means that OSU
Extension program assistants’ higher job satisfaction led to lower turnover intention by increasing employee organizational commitment.

5. Satisfaction with supervisor is a significant predictor of OSU Extension program assistants’ turnover intention, however it did not mediate the relationship between job satisfaction and turnover intention. Given these points, it was concluded that OSU Extension program assistants’ job satisfaction was a significant predictor of turnover intention and effect was not reduced in the size when the satisfaction with supervisor was added in the model.

The results of this study are consistent with previous research and found that job satisfaction, satisfaction with supervisor, organizational commitment, employee’s age, and years of services relate to employee turnover intention. Younger employees and employees with less years of service tended to have higher turnover intention. Lower level of organizational commitment, job satisfaction, and satisfaction with supervisor among OSU Extension program assistants tended to predict employee intention to leave. Moreover, organizational commitment have indirect effect on employee’ turnover intention.

This study provided evidence that age, years of service, job satisfaction, satisfaction with supervisor, and organizational commitment play an important role in an OSU Extension program assistant’s intention to leave the job. Moreover, organized multiple findings on the antecedents and consequences of turnover intention helped to provide recommendations for further implementation. Overall, the findings produced
important implications for both future research on Extension program assistants’ turnover and turnover intention as an organizational policy, procedure, and practice.

Below research findings and their relationship to existing literature are discussed in more details.

**Impact of Demographics on Turnover Intention (RQ 1).**

The first research question was: What is the relationship between employee turnover intention and selected demographics such as age, gender, degree level, program areas, marital status, children living at home, and number of years working in the organization?

The average age of study participants was 41.3 years old. Half of the participants (50%) were between the age of 22 and 40, approximately 41% (40.6%) were between the age of 41 and 60, and the remaining 8.7% were between the ages of 61-72. More than three-quarter were female (87.4%). Nearly three-quarters (67.7%) had a 4-year college degree or higher (Bachelor’s - 55.5%, Master’s - 12.2%). As for marital status: the largest percentage (67.9%) were married, 27.9% were unmarried, and the remaining 8.2% indicated divorced, widowed, and domestic partnerships. In addition, the majority of participants (67.3%) did not have children living at home under 18. The average number of years of service to OSU Extension was 6.31 (SD = 7.87). Approximately two-thirds (66.4%) of participants worked at OSU Extension for less than five years, 10% between 6 and 10 years, and the remaining 19.5% had worked between 11 and 35 years.

The findings about the impact of demographics on employee turnover intention were supported the literature on employee turnover intention in general (Carter, 1989;
Peltokorpi, Allen, & Froese, 2015; Mobley et.al. 1979; Porter & Steers, 1973; Rousan and Henderson, 1996; Tilburg and Miller, 1987). This study found that age and years of service negatively correlate to turnover intention among OSU Extension program assistants. Younger employees may have more job mobility and tend to have more voluntary turnover (Mobley et.al., 1979; Rousan and Henderson, 1996; Spencer, Steers, & Mowday, 1983).

The results of this study supported previous Ohio State University Extension studies conducted by Roausan and Henderson (1996) and Tilburg and Miller (1987). Younger OSU Extension program assistants and those who had less years of service tended to have higher turnover intention. Rousan and Henderson (1996) reported that a majority of OSU Extension agents voluntarily left the Extension organization in their early thirties. Tilburg and Miller (1987) reported that age was one of the best predictor of employee intention to leave and that 23.5% of the variance was predicted by this single variable in the intent to leave the job. At the same time, the authors emphasized that age, tenure in the job, and major program responsibility area positively related to perceived desirability of staying at the job. The results of this study did not support previous study and showed no association between program area and turnover intention because of a few reasons. Majority (62.6%) participates in this study represented Family and Consumer Science program area, approximately 19% represented 4-H Youth Development, only 5.4% were working in Agricultural and Natural Resources program area, and we had zero participates from Community Development program area. The disproportion numbers of participants across program areas could affect the results of this study. Moreover, OSU
Extension HR through personal communication mentioned that big difference in an actual turnover exists across different program areas.

Moreover, the results of this study support the findings of the previous study by Spencer, Steers, & Mowday (1983) who tested a Mobley’s model of turnover on 305 large university employees in the west coast area and found moderate negative correlation between intent to quit and tenure between intent to quit and employee age. The findings of this OSU Extension program assistants study reported low negative correlation between age and turnover intention and negative low association between years of service and turnover intention. Carter (1989) reported a negative correlation between employee intention to leave and age, gender, organization tenure, and program level (program audience: youth and adult). However, program areas positively related to turnover intention. In contrast, the results of this study confirmed that OSU Extension program assistants’ turnover intention was not related to an employee’s program area.

Furthermore, this study did not support findings of other studies showing association between gender and turnover intention (De Moura, Abrams, Retter, Gunnarsdottir, & Ando, 2009; Korunka, Hoonakker, & Carayon ,2008; Xu, 2008). The findings from this research suggested that the gender variable is independent from turnover intention and there is no a significant association found between gender and turnover intention. De Moura et al., (2009) found that association between turnover intentions among men is stronger compared to women. The Chi-squared test of independence in this study revealed that turnover intention among male OSU Extension program assistants was higher compared to female but was not significant because of
very large disproportion between male and female participants. Xu (2008) reported that
effect of age on employee intention to leave for women had weak and non-significant
correlation, however, there he found a strong significant between age and turnover
intention among male. In 2008, Korunka et.al. found that demographic variables such as
age, sex, and job tenure were not significant in the Chi-square difference tests for a
general model of turnover intention. De Moura et.al. (2009) suggested that gender is a
significant predictor of turnover intention. Turnover intention was positively related to
gender, especially to female and other employees’ personal characteristics.

The results of this study partially support the findings of the study by Brough and
Frame (2004). Marital status of OSU Extension program assistants did not have a
significant association with turnover intention. Moreover, data from this study revealed
that the level of education and children living at home under 18 did not have a significant
association with OSU Extension program assistants’ turnover intention. Brough and
Frame (2004) found that gender and marital status did not have a significant relationship
with turnover intention. However, tenure was positively related to turnover intentions.

Like previous research this study found that age and years of service were
significant predictors of OSU Extension program assistants’ turnover intention. Other
demographic variables such as gender, level of education, marital status, children living
at home, and program area were not significant predictors of turnover intention which
were mixed results in previous literature.
Independent Variables Negatively Correlate with Turnover Intention (RQ 2).

The second research question was: What is the relationship between turnover intention and the independent variables organizational commitment, job satisfaction, and satisfaction with supervisor? A growing body of literature for turnover and turnover intention identified job satisfaction, satisfaction with supervisor, and organizational commitment as key predictors of employee withdrawal behavior (Brough and Frame, 2004; Firth, Mellor, Moore, & Loquet, 2003; Igodan, 1984; Martin and Kaufman 2013; Tilburg and Miller, 1987; Yücel, 2012). Findings from this research are generally consistent with previous evidence and stated that OSU Extension program assistants’ job satisfaction, satisfaction with supervisor, and organizational commitment were important predictors of OSU program assistants’ turnover intention.

The OSU Extension program assistants who participated in this study indicated slight agreement with job satisfaction; the average job satisfaction was 3.9 (± .66 SD) on a scale that ranges from 1 to 6. The main reason of the slight agreement with job satisfaction was program assistants’ lower satisfaction with pay 2.44 (± 1.15 SD) and promotion 2.37 (± 1.03 SD). Scott, Swortzel, & Taylor (2005) reported low significant correlation between employees and satisfaction with pay. However, in this study participants were more satisfied with fringe benefits 4.71 (± .84 SD), reward 3.63 (± 1.15 SD), operational procedures 3.54 (± .84 SD), co-workers 5.08 (± .93 SD), work 5.01 (± .85 SD), and communication 4.1 (± .98 SD). The findings of this study was supported by previous studies.
The results of this study supported following findings by Yücel’ (2012) who reported a higher level of job satisfaction had a positive effect on higher organizational commitment and a negative impact on employee turnover intention. Moreover, the findings of this study supported Brough and Frame’s (2004) research results who emphasized that job satisfaction has a strong negative relation with turnover intention. Firth, Mellor, Moore, and Loquet (2003) reported that a higher commitment to the organization and better job satisfaction reduce turnover intention. Spencer, Steers, & Mowday (1983) found positive correlation between intention to quit and actual turnover and negative correlation between intention to quit and overall job satisfaction. According to Igodan (1984), 4-H agents experienced less job satisfaction because of more burnout compared to the agents of other program areas. The author concluded that Extension agents were satisfied with their job when they received rewards based on the level of their job performance.

In this study participants indicated more neutral attitude toward turnover intention, the mean summative score for turnover intention was 3.71 (SD = 2.05, n = 143). Scores ranged from 1 to 7 (minimum to maximum scores). This study supported research findings by Carter et al, (1990) and Martin & Kaufman (2013) who examined Cooperative Extension Service agents’ turnover intention. Carter et al (1990) found negative correlation between organizational commitment and intention to leave the organization. As a single predictor, organizational commitment explained 39.4% of variance in the turnover model. Martin & Kaufman (2013) found strong and negative correlation between both intent to quit and job satisfaction and between intent to leave
and organizational commitment. The authors concluded that Extension agents who were satisfied with their job and committed to the organization do not have intention to leave their job.

Thus, job satisfaction, satisfaction with supervisor, and organizational commitment negatively associate with OSU Extension program assistants’ turnover intention. The results of this study supported previous studies and have direct implications for OSU Extension administration and Extension human resource management toward increasing program assistants’ job satisfaction, satisfaction with supervisors, and organizational commitment that will help to decrease their turnover intention.

**Satisfaction with Supervisor is a Predictor of Turnover Intention (RQ 3).** The third research question was: To what extent does satisfaction with supervisor predict employee turnover intention—controlling for age and years of service? Griffin, Patterson, and West (2001) emphasized the important role of supervisors in the workplace, specifically, the supervisors influence on environment, support, and ability to provide information and feedback. Scholars identified satisfaction with supervisor as critical and highly important because of its effect on employees’ turnover behavior (Avey et al., 2015; Brough and Frame, 2004; DeConinck & Stilwell, 2001; Griffin, Patterson, and West, 2001; Maertz Jr et al., 2004; and Maertz & Griffeth, 2004). Avey et al (2015) indicated that when an employee feels trapped with their supervisor it motivates them to resign out of helplessness. A relationship between ineffective supervision and employee withdrawal behavior requires further research on the effects of a negative workplace.
environment on employee performance. A negative relationship between employee and supervisor might have a harmful effect on long term organizational performance.

In this study respondents indicated neutral and slightly high satisfaction with supervisor. The average satisfaction with supervisor score was 3.88 (± .94) on a scale that ranged from 1 to 5. The supervisory effectiveness in obtaining subordinate satisfaction and job performance was obtained based on the three interrelated skills namely, (1) technical; (2) human relations; and (3) administrative. The results of this study seem to build on previous knowledge stating that satisfaction with supervisor is a significant predictor of OSU Extension program assistant’s turnover intention. Both age and years of service were included in the model, however, they were independent from the relationship between satisfaction with supervisor and turnover intention. The findings of this study revealed that satisfaction with supervisor for OSU Extension program assistants explains a significant proportion of variance (20.3%) in employee turnover. Given these points, it was concluded that increasing satisfaction with supervisor decreases OSU Extension program assistants’ turnover intention.

The results of this study confirmed DeConinck & Stilwell (2001) and Brough and Frame’s (2004) research findings. DeConinck & Stilwell (2001) emphasized that satisfaction with supervisor had a direct influence on employee’s organizational commitment and withdrawal cognition. Brough & Frame (2004) found that satisfaction with supervisor has strong association with job satisfaction and turnover intention. Maertz Jr et. al. (2007) concluded that supervisor support is an important predictor of turnover. The authors mentioned that perceived organizational support becomes less
important when employees receive high supervisor support. Low supervisor support was associated with turnover intention. The findings from this study supported Maertz’ Jr et.al. (2007) study and reported a moderate negative association between satisfaction with supervisor and turnover intention. Higher satisfaction with supervisor tended to lower turnover intention among OSU Extension program assistants.

Thus, the findings of this study supported other studies and demonstrated that satisfaction with supervisor for OSU Extension program assistants explains a significant proportion of variance (20.3%) in employee turnover. The results of this study have direct implications for OSU Extension administration and Extension human resource management toward increasing program assistants’ satisfaction with supervisors that will help to decrease employee’s turnover intention.

**Organizational Commitment Mediates the Relationship between Job Satisfaction and Turnover Intention (RQ 4).** The fourth research question was: To what extent do organizational commitment and satisfaction with supervisor mediate the relationships between job satisfaction and turnover intention? A large body of previous findings indicate that the relationship between employee and organization and employee and supervisor directly and indirectly affect the employee’s perception and attitude toward the organization and also provides a mediated effect on employee turnover cognition (Avey, Wu, and Holley, 2015; Eisenberger, Stinglhamber, Vandenberghe, C., Sucharski, & Rhoades, 2002; Firth, Mellor, Moore, and Loquet, 2003; Joo, 2010; Maertz
Participants in this study reported slightly positive feelings with their perceptions and feelings related to organizational commitment. The average score was 5.45 (± 1.17 SD) on a scale that ranged from 1 to 7. The results of this study offer evidence that organizational commitment does mediate the effect of employee job satisfaction and turnover intention among OSU Extension. Approximately 28% of the variance in turnover intention was accounted for by organizational commitment. Given these points, it was concluded that OSU Extension program assistants’ turnover intention was significantly impacted by organizational commitment. It means that OSU Extension program assistants’ higher job satisfaction led to lower turnover intention by increasing employee organizational commitment.

The findings of this study confirmed Joo (2010) findings and offered evidence that organizational commitment does mediate the effect of employee job satisfaction and turnover intention among OSU Extension program assistants. Joo (2010) concluded that organizational commitment plays an important role as a full mediator in employees’ turnover intention. The author found that higher organizational commitment affects turnover intention. Approximately 40% of the variance in turnover intention was explained by organizational commitment. Turnover intention was significantly impacted by organizational commitment.

Thus, the findings of this study supported other studies and demonstrated that OSU Extension program assistants’ higher job satisfaction led to lower turnover intention.
by increasing employee organizational commitment. The results of this study have direct implications for OSU Extension administration and Extension human resource management toward increasing program assistants’ organizational commitment that will help to decrease employee’s turnover intention.

**Satisfaction with Supervisor Does Not Mediate the Relationship between Job Satisfaction and Turnover Intention (RQ 4).** This study first attempted to define mediation effect of satisfaction with supervisor on the relationship between job satisfaction and turnover intention. The researcher hypothesized that satisfaction with supervisor mediates the effect of job satisfaction on turnover intention based on the limited previous research results. Satisfaction with supervisor is a significant predictor of OSU Extension program assistants’ turnover intention, however it did not mediate the relationship between job satisfaction and turnover intention. Given these points, it was concluded that OSU Extension program assistants’ job satisfaction was a significant predictor of turnover intention and effect was not reduced in the size when the satisfaction with supervisor was added in the model.

Thus, the results of this study did not support Firth, Mellor, Moore, and Loquet (2003) and Avey, Wu, and Holley (2015). Firth, Mellor, Moore, and Loquet (2003) emphasized that emotional support from supervisor mediates the relationship between job satisfaction and turnover intention. Avey, Wu, and Holley (2015) concluded that ineffective supervision has an indirect influence on employee withdrawal behavior. The results of OSU Extension turnover study showed that satisfaction with supervisor is a significant predictor of employee’s turnover intention by itself, however its effect was not
significant in the model that measured relationship between job satisfaction and turnover intention.

**Recommendations for Practice**

Human capital is an essential resource of any organization and employee turnover and retention are vital concerns. Extension program assistants are an important resource for OSU Extension. Taking into consideration these findings, human resource development practitioners should seek ways to enhance organizational effectiveness through improving employee job satisfaction, satisfaction with supervisor, and organizational commitment. Previous and current studies showed that employees with a higher level of job satisfaction, satisfaction with supervisor, and organizational commitment tended to have lower turnover intention.

The results of this study might be used to inform OSU Extension personnel development and organizational policy. Sandhya and Kumar (2011) discussed employee retention strategies and recommended a few that can be applicable to Extension organizations. For instance, development of personal growth opportunities and professional training, a supportive and encouraging work environment, and “hire the right people for the right job in a right place at the right time from the beginning” (p.1782). Howatt HR Consulting Inc (Howatt W.A, N/A) proposed an employee retention model – SUCCESS, where HR professionals should monitor critical issues and employees’ needs at the workplace that have to be addressed. Moreover, they suggested fostering an environment of learning and trust, evaluating employees, continuously looking for
employee’s feedback to avoid misunderstandings, and enhancing the workplace environment through motivation, professional, ethical, and moral aspects.

Liou (1989) wrote that employees' turnover intention affects voluntary turnover and may be influenced by employees’ professional orientation. To reduce turnover intention among Extension employees’ human resources personnel should improve the following areas of their responsibilities: (1) employee recruitment and hiring; (2) training and development practices; (3) improve evaluation and supervision through employee feedback, and (4) compensation and benefits (Martin & Kaufman, 2013). Professional orientation and development are important aspects in an Extension organization.

Extension human resource development practitioners need to monitor employee’s job satisfaction through monitoring the intrinsic and extrinsic nature of employees’ satisfaction with work environment, satisfaction with supervisor, and organizational commitment. Maertz Jr et al. (2004) and Maertz and Griffeth (2004) mentioned that voluntary turnover increases when the employee sees the supervisor as attached to the organization and does not contribute a loyal and inspiring attitude from him/her. Thus, to encourage long-term employment among OSU Extension program assistants, HR practitioners might offer training for middle level supervisors that can focus on being rewarding and supportive with employees to foster a supportive environment.

OSU Extension administration should foster a collaborative relationship between supervisor and subordinate. Controlling Extension program assistants’ workloads and enhancing the relationship with supervisor may positively affect turnover reduction among this group of employees. Additionally, OSU Extension could invest in an internal
leadership development program for Extension administration and supervisors that will help decrease the level of job dissatisfaction and turnover intention among subordinates. A lower rate of turnover among program assistants who are actively involved in Extension educational outreach benefits the entire Extension organization. It is important to monitor employee’s organizational commitment, job satisfaction, satisfaction with supervisors, and turnover intention.

OSU Extension could implement a survey-feedback practice that will help to develop relevant retention strategies and increase level of organizational commitment, job satisfaction, and satisfaction with supervisor. Joo (2010) mentioned that less education among workers lead to different levels of organizational commitment.

OSU Extension could also implement job training for program assistants for different programs based on their employment stages to support their organizational commitment, job satisfaction, and satisfaction with supervisor.

OSU Extension administration and County Extension directors must have a better understanding of factors that influence program assistant turnover intention. OSU Extension should be aware of the mediation effect of organizational commitment on the relationship between job satisfaction and turnover intention. Monitoring and diagnosing employees’ perception and attitude as related to job withdrawal behavior are important HR actions towards the retention of OSU Extension employees. The findings from this study could also be used to:

- Develop specific organizational and HR policies and procedures for OSU Extension program assistants’ recruitment.
Offer professional development programs for program assistants and their immediate supervisors.

Improve retention strategies for OSU Extension program assistants.

Summarizing, the findings from this study have direct implications for OSU Extension administration, Extension human resource management (HRM), and human resource development (HRD) practitioners. There are several recommendations that Extension administrators, HRM, and HRD practitioners may use to improve their retention strategies based on the results of this study. HRM should address the work culture, work responsibilities, and realistic expectations during job interviews to effectively match organizational and individual needs and goals. Collecting feedback on a regular basis from Extension program assistants help better understand employees’ issues, challenges, and needs at the work place. Feedback results will help to nurture mutual communication for better organizational effectiveness.

Professional development opportunities and training should be prioritized for OSU Extension program assistants that increase employee’s satisfaction with work itself. First, OSU Extension HRD personnel should offer leadership training for administrators and program assistants’ immediate supervisors that help them reward and support employees to foster a supportive work environment. Timely using appropriate intrinsic and extrinsic motivation tools help to make the workplace more professionally attractive to current employees. Another important aspect that HRD should offering training to address professional ethics and morale at the workplace for program assistants and
Immediate supervisors. These efforts will help foster an efficient work environment, long-term employment, and advancement opportunities.

Immediate supervisors should help employees target professional development opportunities and assist in career plan development. Moreover, Extension professional associations might offer needs-based professional development opportunities, mentoring programs, and peer support.

**Recommendations for Future Research**

Based on the findings of this study, a literature review, and my insights as a researcher, the following recommendations are offered for future research in turnover intention. Results of future research will help Extension administrators to foster Extension program assistants’ job satisfaction, satisfaction with supervisor, and organizational commitment. Addressing the work and personal issues of Extension program assistants will foster a friendly and effective work environment that provide excellence in Extension organization outreach.

Quasi-experimental research design can be used to measure employee’s behavioral change occurring as a result of educational intervention or training in the organization. This will help to identify strategy to improve key indicators related to turnover intention among OSU Extension program assistants. Longitudinal research will help to investigate both how turnover intention among program assistant can predict actual turnover and how program assistant turnover rate relates to employee’s replacement costs.
Based on the literature review, the turnover and turnover intention models could be expanded to other related variables such as stress, burnout, job alternatives, balancing personal and professional life, and other factors that might affect program assistants’ turnover intention. Furthermore, future studies might explore the mediation effect of work burnout and work stress on the relationship between job satisfaction and employee turnover intention.

Qualitative research methodology would be appropriate to extend the current research that will help better understanding of Extension program assistants’ withdrawal behavior. For example, focus groups or face-to-face interviews would provide a deeper insights on program assistants’ desire to leave the organization.

Summary

An online survey was used to assess Ohio State University Extension program assistants’ turnover intentions. The methods provided a strong foundation for exploring OSU Extension program assistants’ turnover intentions.

Job satisfaction, satisfaction with supervisor, organizational commitment, employee’s age and years of service were key predictors of OSU Extension program assistants’ turnover intention. We found that gender, educational level, marital status, children living at home under 18, and program area were not significant predictors for turnover intention among this category of employees.

This study helped provide effective recommendations toward implementing retention strategies for this category of Extension employee. Moreover, results of this research provided insights for future research as well as a practical basis for Extension
organizational strategy and change. Further research is needed to continue investigating factors affecting program assistants’ turnover intention.

OSU Extension’s ability to provide supervisory support and professional growth for program assistants is important to ensuring a high quality of service. It is highly important to all OSU Extension leaders, administrative and support personnel, middle level supervisors, and immediate supervisors to focus on addressing factors associated with OSU Extension program assistants’ turnover intention.

Investing in Extension program assistants will help fulfill Extension’s long term mission. Strong and Harder (2009) suggested that Extension programming would have a larger effect on community and individuals if there was a lower rate of Extension employee turnover. Furthermore, they emphasized that investing in Extension employees may positively influence the educational outreach mission of the Extension organization. The implementation of this study’s recommendations should decrease employee turnover intention by decrease OSU Extension program assistants’ dissatisfaction with both the job itself and their supervisors and increase employees’ organizational commitment.


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National Association of State Universities and Land-Grant Colleges (NASULGC), Extension Committee on Organization and Policy. (2002). *The Extension system:*


Nitesh, S., NandaKumar, V. M., & Kumar, A. S. (2013). Role of Pay as Perceived Organizational Support Contributes to Employee's Organizational Commitment. Advances in Management, 6(8), 52. Retrieved from http://search.proquest.com/openview/b8272290b1613da8c1b708a8c0f8c849c/1?pq-origsite=gscholar&cbl=2030322


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The Ohio State University Extension Strategic Plan, Empowerment through education, Columbus, Ohio. Retrieved from https://extension.osu.edu/about/osue-strategic-plan


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Yi-En Wei (2014). ESQREM 7651 Regression Analysis. Class notes, autumn semester, 2014, OSU, Columbus, Ohio


Appendix A: Job Satisfaction Survey Scale
## Part 1 Job Satisfaction

Listed below are several job-related statements. Please rate each statement choosing only one number that best describes your perceptions and feelings on a scale from 1 = disagree very much to 6 = agree very much. If you do not know how to answer a question you may select “N/A”. The Job Satisfaction Survey was developed by Spector P.E. (1985). Copyright Paul E. Spector 1994. All rights reserved.

<table>
<thead>
<tr>
<th>Disagree Very Much</th>
<th>Disagree Moderately</th>
<th>Disagree Slightly</th>
<th>Agree Slightly</th>
<th>Agree Moderately</th>
<th>Agree Very Much</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Statement</th>
<th>Disagree Very Much</th>
<th>Disagree Slightly</th>
<th>Agree Slightly</th>
<th>Agree Very Much</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel I am being paid a fair amount for the work I do</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>There is really too little chance for promotion on my job</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My supervisor is quite competent in doing his/her job</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am not satisfied with the benefits I receive</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>When I do a good job, I receive the recognition for it that I should receive</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Many of our rules and procedures make doing a good job difficult</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I like the people I work with</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I sometimes feel my job is meaningless</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Communications seems good within the organization</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

195
<table>
<thead>
<tr>
<th>Disagree Very Much</th>
<th>Disagree Moderately</th>
<th>Disagree Slightly</th>
<th>Agree Slightly</th>
<th>Agree Moderately</th>
<th>Agree Very Much</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Statement</th>
<th>Disagree Very Much</th>
<th>Disagree Slightly</th>
<th>Agree Slightly</th>
<th>Agree Very Much</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raises are too few and far between</td>
<td>×</td>
<td>×</td>
<td>×</td>
<td>×</td>
</tr>
<tr>
<td>Those who do well on the job stand a fair chance of being promoted</td>
<td>×</td>
<td>×</td>
<td>×</td>
<td>×</td>
</tr>
<tr>
<td>The benefits we receive are as good as most other organizations offer</td>
<td>×</td>
<td>×</td>
<td>×</td>
<td>×</td>
</tr>
<tr>
<td>I do not feel that the work I do is appreciated</td>
<td>×</td>
<td>×</td>
<td>×</td>
<td>×</td>
</tr>
<tr>
<td>My efforts to do a good job are seldom blocked by red tape</td>
<td>×</td>
<td>×</td>
<td>×</td>
<td>×</td>
</tr>
<tr>
<td>I find I have to work harder at my job than I should because of the incompetence of people I work with</td>
<td>×</td>
<td>×</td>
<td>×</td>
<td>×</td>
</tr>
<tr>
<td>I like doing the things I do at work</td>
<td>×</td>
<td>×</td>
<td>×</td>
<td>×</td>
</tr>
<tr>
<td>The goals of this organization are not clear to me</td>
<td>×</td>
<td>×</td>
<td>×</td>
<td>×</td>
</tr>
<tr>
<td></td>
<td>Disagree Very Much</td>
<td>Disagree Moderately</td>
<td>Disagree Slightly</td>
<td>Agree Slightly</td>
</tr>
<tr>
<td>----------------------</td>
<td>--------------------</td>
<td>---------------------</td>
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<td>---------------</td>
</tr>
<tr>
<td>I feel unappreciated by the organization when I think about what they pay me</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>People get ahead as fast here as they do in other places</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>The benefit package we have is equitable</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>There are few rewards for those who work here</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I have too much to do at work</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I enjoy my co-workers</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I often feel that I do not know what is going on with the organization</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I feel a sense of pride in doing my job</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Disagree Very Much</td>
<td>Disagree Moderately</td>
<td>Disagree Slightly</td>
<td>Agree Slightly</td>
<td>Agree Moderately</td>
</tr>
<tr>
<td>--------------------</td>
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<td>---------------</td>
<td>------------------</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

- I feel satisfied with my chances for salary increases
- There are benefits we do not have which we should have
- I have too much paperwork
- I don’t feel my efforts are rewarded the way they should be
- I am satisfied with my chances for promotion
- There is too much bickering and fighting at work
- My job is enjoyable
- Work assignments are often not fully explained
Use of Permission

From: Spector, Paul [mailto:psetter@usf.edu]
Sent: Tuesday, June 28, 2016 4:19 PM
To: Windon, Suzanna R. <windon.9@osu.edu>
Subject: RE: JSS - Permission to Use

Dear Suzanna:

You have my permission for noncommercial research/teaching use of the JSS. You can find copies of the scale in the original English and several other languages, as well as details about the scale's development and norms in the Scales section of my website (link below). I allow free use for noncommercial research and teaching purposes in return for sharing of results. This includes student theses and dissertations, as well as other student research projects. Copies of the scale can be reproduced in a thesis or dissertation as long as the copyright notice is included, "Copyright Paul E. Spector 1994, All rights reserved." Results can be shared by providing an e-copy of a published or unpublished research report (e.g., a dissertation). You also have permission to translate the JSS into another language under the same conditions in addition to sharing a copy of the translation with me. Be sure to include the copyright statement, as well as credit the person who did the translation with the year.

Thank you for your interest in the JSS, and good luck with your research.

Best,

Paul Spector, Distinguished Professor
Department of Psychology
PCD 4118
University of South Florida
Tampa, FL 33620
813-974-0357
psetter [at symbol] usf.edu
http://shell.cas.usf.edu/~setter

From: Windon, Suzanna R. <mailto:windon.9@osu.edu>
Sent: Tuesday, June 28, 2016 4:10 PM
To: Spector, Paul <pspector@usf.edu>
Cc: Windon, Suzanna R. <windon.9@osu.edu>
Subject: JSS - Permission to Use

Dear Dr. Spector
My name is Suzanna Windon. I am a doctoral student at the Ohio State University. I am conducting my dissertation research on the effect of job satisfaction, organizational commitment, and burnout on University Extension employee turnover intention in Ohio. I am contacting you to obtain permission to use your Job Satisfaction Survey (JSS) in my study. Would you please kindly let me know your decision indicating it by replying with your approval? Please let me know if there is any question or concern.

Thank you!

I look forward to hear from you soon. Thank you for your consideration.

Sincerely,

Suzanna Windon

Doctoral Student, The Ohio State University
Appendix B: Satisfaction With My Supervisor Scale
## Part 2 The Satisfaction with My Supervisor

Listed below are several work supervisor related statements. Please rate each statement choosing only one number that best describes your perceptions and feelings on a scale from 1 = Very Disagree very much to 5 = Very Satisfied. If you do not know how to answer a question you may select “N/A”.

<table>
<thead>
<tr>
<th></th>
<th>Very Dissatisfied</th>
<th>Dissatisfied</th>
<th>Neither Satisfied or Dissatisfied</th>
<th>Satisfied</th>
<th>Very Satisfied</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>The way my supervisor listens when I have something important to say</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>The way my supervisor sets clear work goals</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>The way my supervisor treats me when I make a mistake</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>My supervisor’s fairness in appraising my job performance</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>The way my supervisor is consistent in his/her behavior toward subordinates</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>The way my supervisor helps me to get the job done</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>The way my supervisor gives me credit for my ideas</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>The way my supervisor gives me clear instruction</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>The way my supervisor informs me about work changes ahead of time</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Very Dissatisfied</td>
<td>Dissatisfied</td>
<td>Neither Satisfied or Dissatisfied</td>
<td>Satisfied</td>
<td>Very Satisfied</td>
<td></td>
</tr>
<tr>
<td>--------------------------------</td>
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<td>----------------------------------</td>
<td>-----------</td>
<td>----------------</td>
<td></td>
</tr>
<tr>
<td>The way my supervisor follows through to get problems solved</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>The way my supervisor understand the problems I might run into doing the job</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>The way my supervisor shows concern for my career progress</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>My supervisor’s backing me up with other management</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>The frequency with which I get a pat on the back for doing a good job</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>The technical competence of my supervisors</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>The amount of time I get to learn a task before I’m moved to another task</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>The time I have to do the job right</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>The way my job responsibilities are clearly defined</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>
Use of Permission

From: Vida [mailto:vscarpello@bellsouth.net]
Sent: Thursday, June 30, 2016 3:21 PM
To: Windon, Suzanna R. <windon.9@osu.edu>
Subject: RE: SWMSS - Permission to Use

Hi Suzanna, I give you my permission to use the SWMSS. Please let me know your results. Best wishes with your dissertation research.

Vida Scarpello

Sent from Mail for Windows 10

From: Windon, Suzanna R.
Sent: Tuesday, June 28, 2016 4:26 PM
To: vscarpello@bellsouth.net; mgtvvs@langate.gsu.edu
Cc: Windon, Suzanna R.
Subject: SWMSS - Permission to Use

Dear Dr. Scarpello,

My name is Suzanna Windon. I am a doctoral student at the Ohio State University. I am conducting my dissertation research on the effect of job satisfaction, satisfaction with supervisor, organizational commitment, and burnout on University Extension employee turnover intention in Ohio. I am contacting you to obtain permission to use your Satisfaction With My Supervisor Scale (SWMSS) in my study. Would you please kindly let me know your decision indicating it by replying with your approval. Please let me know if there is any question or concern.

Thank you!
I look forward to hear from you soon. Thank you for your consideration.

Sincerely,

Suzanna Windon
Doctoral Student, The Ohio State University

You're quite welcome.

Robert J. Vandenberg
Robert O. Arnold Professor of Business
Chair, Department of Management
Terry College of Business  
Department of Management  
University of Georgia  
Athens, GA 30602-6256

Voice: 706-542-3720  
Fax: 706-542-3743  
Home: 706-310-0906

Terry College: http://www.terry.uga.edu

Department of Management: http://www.terry.uga.edu/management/

Fellow, William A. and Barbara R. Owens Institute for Behavioral Research -  
- http://www.ibr.uga.edu/

Fellow and Short Course Instructor, Consortium for the Advancement of Research  
Methods and Analysis — http://und.edu/carma/

**From:** "Windon, Suzanna R." <windon.9@osu.edu>  
**Date:** Friday, July 1, 2016 at 1:45 PM  
**To:** Robert Vandenberg <rvandenb@uga.edu>  
**Subject:** FW: SWMSS - Permission to Use

Dr. Vandenberg,

Thank you very much for granting the permission to use your instrument.

Sincerely,

Suzanna Windon

**From:** Robert J Vandenberg [mailto:rvandenb@uga.edu]  
**Sent:** Friday, July 01, 2016 11:49 AM  
**To:** Windon, Suzanna R. <windon.9@osu.edu>  
**Subject:** Re: SWMSS - Permission to Use

Dear Ms. Windon,

You most certainly have permission to use the SWMSS. All the best to you as you  
complete your dissertation.
Sincerely,
Bob Vandenberg

Robert J. Vandenberg
Robert O. Arnold Professor of Business
Chair, Department of Management

Terry College of Business
Department of Management
University of Georgia
Athens, GA 30602-6256

Voice: 706-542-3720
Fax: 706-542-3743
Home: 706-310-0906

Terry College: http://www.terry.uga.edu
Department of Management: http://www.terry.uga.edu/management/

Fellow, William A. and Barbara R. Owens Institute for Behavioral Research — http://www.ibr.uga.edu/
Fellow and Short Course Instructor, Consortium for the Advancement of Research Methods and Analysis — http://und.edu/carma/

From: "Windon, Suzanna R." <windon.9@osu.edu>
Date: Wednesday, June 29, 2016 at 3:06 PM
To: Robert Vandenberg <rvandenb@uga.edu>
Cc: "Windon, Suzanna R." <windon.9@osu.edu>
Subject: SWMSS - Permission to Use

Dear Dr. Vandenberg

I am Suzanna Windon, a doctoral candidate in the department of Agricultural Communication, Education, and Leadership at the Ohio State University.

I am conducting my dissertation research on the effect of job satisfaction, satisfaction with supervisor, organizational commitment, and burnout on University Extension employee turnover intention in Ohio. I am contacting you to obtain permission to use the Satisfaction With My Supervisor Scale (SWMSS) in my study. Your article was
published in Journal of Management in 1987 Vol.13, No.3, 447-466  Vida Scarpello & Robert J. Vandenberg “The Satisfaction With My Supervisor Scale: Its Utility for Research and Practical Applications”. Would you please kindly let me know your decision indicating it by replying with your approval? If there is any question and concern regarding my study, please feel free to contact me. I would be more than happy to answer your questions and provide more details about my study.

Thank you and I look forward to hear from you soon.

Sincerely,

Suzanna Windon
Doctoral Student, The Ohio State University

Suzanna Windon
Market Analyst, Program Development & Evaluation
Ohio State University Extension | College of Food, Agricultural, and Environmental Sciences
Suite 25, Agricultural Administration Building, 2120 Fyffe Rd., Columbus, OH 43210
614.292.8340 Office | 614.688.3807 Fax | pde.osu.edu
Appendix C: Organizational Commitment Scale
Use of Permission

From: Rick Mowday [mailto:rmowday@uoregon.edu]
Sent: Wednesday, July 06, 2016 3:41 PM
To: Windon, Suzanna R. <windon.9@osu.edu>
Subject: Re: OCQ - Permission to Use

Suzanna

The Organizational Commitment Questionnaire (OCQ) was originally developed by the late Professor Lyman Porter. He decided not to copyright the instrument to encourage its use by others in research. As a consequence, the OCQ legally exists in the public domain and you do not need explicit permission to use it in your study.

Good luck in your dissertation research.

Rick

From: Windon, Suzanna R. <windon.9@osu.edu>
Sent: Wednesday, July 6, 2016 6:03 AM
To: Rick Mowday
Cc: Windon, Suzanna R.
Subject: OCQ - Permission to Use

Dear Dr. Mowday,

I am Suzanna Windon, a doctoral candidate in the department of Agricultural Communication, Education, and Leadership at the Ohio State University.

I am conducting my dissertation research on the effect of job satisfaction, satisfaction with supervisor, organizational commitment, and burnout on University Extension employee turnover intention in Ohio. I am contacting you to obtain permission to use the Organizational Commitment Questionnaire (OCQ) in my study. Your article was published in Journal of Vocational Behavior 14, 224-247 (1979). R. T. Mowday and R.M. Steers “The Measurement of Organizational Commitment”. Would you please kindly let me know your decision indicating it by replying with your approval? If there is any question and concern regarding my study, please feel free to contact me. I would be more than happy to answer your questions and provide more details about my study.

Thank you and I look forward to hear from you soon.

Sincerely,
Appendix D: Turnover Intention Scale
Part 4 Turnover Intention

Listed below are several statements which may represent your attitudes, intentions, feelings, and thoughts that you may have related to your current position with Ohio State University Extension and the Extension Organization in general. Please rate each statement choosing only one number that best describes your perceptions and feelings on a scale from 1 = Strongly Disagree to 7 = Strongly Agree. If you do not know how to answer a question you may select “N/A”.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Moderately Disagree</th>
<th>Slightly Disagree</th>
<th>Neither Agree Nor Disagree</th>
<th>Slightly Agree</th>
<th>Moderately Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree (1)</th>
<th>Neither Agree Nor Disagree (4)</th>
<th>Strongly Agree (7)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I will actively look for a new job in the next year</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
</tr>
<tr>
<td>I often think about leaving the organization</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
</tr>
<tr>
<td>I will probably look for a new job in the next year</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
</tr>
</tbody>
</table>
Use of Permission

From: Steven Heeringa [mailto:sheering@umich.edu]
Sent: Friday, September 16, 2016 2:00 PM
To: Windon, Suzanna R. <windon.9@osu.edu>
Cc: Trivellore Raghunathan <teraghu@umich.edu>; Patty Maher <pmaher@umich.edu>; Mary Ramirez <mramirez@umich.edu>; Steven Pennell <spennell@umich.edu>
Subject: Permission to Use the MOAQ Turn Over Scale

Good afternoon Suzanna,

Thank you for note requesting permission to use the Turnover scale from the Michigan Organizational Assessment Questionnaire. After researching the prospect that a former member of our faculty has copyrighted these scales, I have reached the conclusion that you are approved to use this three item scale with appropriate citation of its source (the MOAQ) and the original authors (Camman et al. 1979).

Best wishes for success in your dissertation research.

Sincerely,

Steven G. Heeringa
Associate Director, Survey Research Center

From: Mary Ramirez [mailto:mramirez@umich.edu]
Sent: Wednesday, September 14, 2016 3:50 PM
To: Windon, Suzanna R. <windon.9@osu.edu>
Subject: follow up on survey questions and use

Hello Suzanna -

You will be hearing from Dr. Steven Heeringa or another Survey Research Center administrator to discuss the use of the 3 questions.

I can confirm that Dr. Raghunathan received your message :)

Good luck with your work!

Mary R
Mary E. Ramirez, CIP
Assistant Director
Health Sciences and Behavioral Sciences Institutional Review Board

Certificate of Confidentiality Coordinator
U-M Office of Research
Human Research Protection Program

University of Michigan
2800 Plymouth Road
Building 520 NCRC, Room 1169
Ann Arbor, MI 48109-2800
(phone) 734-936-0933
(fax) 734-936-1852
Appendix E: Online Survey Instrument
Welcome to the OSU Extension Program Assistant Turnover Intention Survey

Thank you for participating in this dissertation research. The OSU Institutional Review Board for human subject participation reviewed and approved this research, IRB protocol # 201660460. The information below provides you with background about this study and what you expect if you decide to participate.

The purpose of this study is to identify factors related to Extension program assistants’ turnover intention. The results of this study will help to improve human resource practices toward retention of OSU Extension program assistants.

The questionnaire will take about 10-20 minutes to complete; there are no right or wrong answers. If you do not know how to answer a question you may select “N/A”. Participation is voluntary. If you feel uncomfortable, you may withdraw answering questions at any point in time. You may refuse to participate in this study without penalty or loss of benefits to which you are otherwise entitled. Your decision will not affect your current and future relationship with OSU in any way.

Your privacy is important! All your responses will be maintained on a secure OSU Qualtrics server. Every effort will be made to keep your responses confidential, however, we are using the Internet, and there is a chance that someone could access your online responses without permission. Though highly unlikely, should a breach of confidentiality occur, there are minimal risks to your reputation and potential embarrassment, neither of which affects your employability with OSU Extension now or in the future.

Collected data will be used for research purpose only. None of your individual responses will be shared with administrators. After the research will be finished all identifiers, such as your e-mail address, will be permanently removed from the data and destroyed. All information will be grouped with other participants and reported as aggregated data for further statistical analysis.

All participants who provide consent to participate in this study will be automatically entered into a drawing for one of eight (8) $25 gift cards (not purchased with OSU funds). Odds to win are approximately 1:22, with the potential to be lower based on the total number of people who participate in this study. The researcher will randomly draw the winners and we will contact you via e-mail after the survey is closed. By law, payments to subjects are considered taxable income.

If you have any questions, concerns, or complaints about research, or feel you have been harmed by taking part in the study, feel free to contact Suzanna R. Windon at (614) 271-7442 / windon.9@osu.edu or Dr. Scott Scheer at 614-292-6738 / someselb@osu.edu.

For questions about your rights as a research participant, or to speak with someone who is not a member of the research team, you may contact Ms. Sandra Meadows in the Office of Responsible Research Practices at 1-800-676-6251.

Participant is giving permission for the researcher to use the collected data for research purposes by clicking the “>>” button below and completing the electronic survey.

We appreciate your help with this research and thank you in advance.

Many Thanks!
## Part 1 Job Satisfaction

Listed below are several job-related statements. Please rate each statement choosing only one number that best describes your perceptions and feelings on a scale from 1 = disagree very much to 6 = agree very much. If you do not know how to answer a question you may select “N/A”. The Job Satisfaction Survey was developed by Spector P.E. (1989). Copyright Paul E. Spector 1994, All rights reserved.

<table>
<thead>
<tr>
<th>Disagree Very Much</th>
<th>Disagree Moderately</th>
<th>Disagree Slightly</th>
<th>Agree Slightly</th>
<th>Agree Moderately</th>
<th>Agree Very Much</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
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<td>5</td>
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<table>
<thead>
<tr>
<th>Statement</th>
<th>Disagree Very Much (1)</th>
<th>Disagree Slightly (3)</th>
<th>Agree Slightly (4)</th>
<th>Agree Moderately (5)</th>
<th>Agree Very Much (6)</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel I am being paid a fair amount for the work I do</td>
<td></td>
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<tr>
<td>There is really too little chance for promotion on my job</td>
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<tr>
<td>My supervisor is quite competent in doing his/her job</td>
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<tr>
<td>I am not satisfied with the benefits I receive</td>
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<tr>
<td>When I do a good job, I receive the recognition for it that I should receive</td>
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<td></td>
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<tr>
<td>Many of our rules and procedures make doing a good job difficult</td>
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<tr>
<td>I like the people I work with</td>
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<tr>
<td>I sometimes feel my job is meaningless</td>
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<tr>
<td>Communications seems good within the organization</td>
<td></td>
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<tr>
<td>Disagree Very Much</td>
<td>Disagree Moderately</td>
<td>Disagree Slightly</td>
<td>Agree Slightly</td>
<td>Agree Moderately</td>
<td>Agree Very Much</td>
<td>× N/A</td>
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<td>5</td>
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<tr>
<th>Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raises are too few and far between</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Those who do well on the job stand a fair chance of being promoted</td>
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<tr>
<td>The benefits we receive are as good as most other organizations offer</td>
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<tr>
<td>I do not feel that the work I do is appreciated</td>
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<tr>
<td>My efforts to do a good job are seldom blocked by red tape</td>
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<tr>
<td>I find I have to work harder at my job than I should because of the incompetence of people I work with</td>
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<tr>
<td>I like doing the things I do at work</td>
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<tr>
<td>The goals of this organization are not clear to me</td>
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</tr>
<tr>
<td></td>
<td>Disagree Very Much</td>
<td>Disagree Moderately</td>
<td>Disagree Slightly</td>
<td>Agree Slightly</td>
<td>Agree Moderately</td>
<td>Agree Very Much</td>
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<td>(5)</td>
<td>(6)</td>
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</tr>
<tr>
<td>I feel unappreciated by the organization when I think about what they pay me</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td></td>
</tr>
<tr>
<td>People get ahead as fast here as they do in other places</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td></td>
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<tr>
<td>The benefit package we have is equitable</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
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<tr>
<td>There are few rewards for those who work here</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
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<tr>
<td></td>
<td>Disagree Very Much</td>
<td>Disagree Moderately</td>
<td>Disagree Slightly</td>
<td>Agree Slightly</td>
<td>Agree Moderately</td>
<td>Agree Very Much</td>
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<tr>
<td>I have too much to do at work</td>
<td>○</td>
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<td>○</td>
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<tr>
<td>I enjoy my co-workers</td>
<td>○</td>
<td>○</td>
<td>○</td>
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<tr>
<td>I often feel that I do not know what is going on with the organization</td>
<td>○</td>
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<tr>
<td>I feel a sense of pride in doing my job</td>
<td>○</td>
<td>○</td>
<td>○</td>
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<td></td>
<td>Disagree Very Much (1)</td>
<td>Disagree Slightly (3)</td>
<td>Agree Slightly (4)</td>
<td>Agree Moderately (5)</td>
<td>Agree Very Much (6)</td>
<td>N/A</td>
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<tr>
<td>I feel satisfied with my chances for salary increases</td>
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<tr>
<td>There are benefits we do not have which we should have</td>
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<td></td>
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<tr>
<td>I have too much paperwork</td>
<td></td>
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<tr>
<td>I don't feel my efforts are rewarded the way they should be</td>
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<tr>
<td>I am satisfied with my chances for promotion</td>
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<tr>
<td>There is too much bickering and fighting at work</td>
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<tr>
<td>My job is enjoyable</td>
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<tr>
<td>Work assignments are often not fully explained</td>
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</tbody>
</table>
### Part 2 The Satisfaction with My Supervisor

Listed below are several work supervisor related statements. Please rate each statement choosing only one number that best describes your perceptions and feelings on a scale from 1 = Very Disagree very much to 5 = Very Satisfied. If you do not know how to answer a question you may select “N/A”.

<table>
<thead>
<tr>
<th>Very Dissatisfied</th>
<th>Dissatisfied</th>
<th>Neither Satisfied or Dissatisfied</th>
<th>Satisfied</th>
<th>Very Satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Statement</th>
<th>Very Dissatisfied</th>
<th>Neither Satisfied or Dissatisfied</th>
<th>Very Satisfied</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>The way my supervisor listens when I have something important to say</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>The way my supervisor sets clear work goals</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
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<tr>
<td>The way my supervisor treats me when I make a mistake</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>My supervisor’s fairness in appraising my job performance</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>The way my supervisor is consistent in his/her behavior toward subordinates</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>The way my supervisor helps me to get the job done</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>The way my supervisor gives me credit for my ideas</td>
<td>○</td>
<td>○</td>
<td>○</td>
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<tr>
<td>The way my supervisor gives me clear instruction</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>The way my supervisor informs me about work changes ahead of time</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td></td>
<td>Very Dissatisfied</td>
<td>Dissatisfied</td>
<td>Neither Satisfied or Dissatisfied</td>
<td>Satisfied</td>
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<tr>
<td>-------------------------------------------</td>
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</tr>
<tr>
<td><strong>The way my supervisor follows through to get problems solved</strong></td>
<td>○ ○ ○ ○ ○</td>
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<tr>
<td><strong>The way my supervisor understand the problems I might run into doing the job</strong></td>
<td>○ ○ ○ ○ ○</td>
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<tr>
<td><strong>The way my supervisor shows concern for my career progress</strong></td>
<td>○ ○ ○ ○ ○</td>
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<tr>
<td><strong>My supervisor's backing me up with other management</strong></td>
<td>○ ○ ○ ○ ○</td>
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<tr>
<td><strong>The frequency with which I get a pat on the back for doing a good job</strong></td>
<td>○ ○ ○ ○ ○</td>
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<tr>
<td><strong>The technical competence of my supervisors</strong></td>
<td>○ ○ ○ ○ ○</td>
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<tr>
<td><strong>The amount of time I get to learn a task before I'm moved to another task</strong></td>
<td>○ ○ ○ ○ ○</td>
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<tr>
<td><strong>The time I have to do the job right</strong></td>
<td>○ ○ ○ ○ ○</td>
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<tr>
<td><strong>The way my job responsibilities are clearly defined</strong></td>
<td>○ ○ ○ ○ ○</td>
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### Part 3 Organizational Commitment

Listed below are several organizational commitment statements. Please rate each statement choosing only one number that best describes your perceptions and feelings on a scale from 1 = Strongly Disagree to 7 = Strongly Agree. If you do not know how to answer a question you may select “N/A”.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Moderately Disagree</th>
<th>Slightly Disagree</th>
<th>Neither Agree Nor Disagree</th>
<th>Slightly Agree</th>
<th>Moderately Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
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</tbody>
</table>

| I am willing to put in a great deal of effort beyond that normally expected in order to help this organization be successful |  |  |  |  |  |  |
| I talk up this organization to my friends as a great organization to work for |  |  |  |  |  |  |
| I would accept almost any type of job assignment in order to keep working for this organization |  |  |  |  |  |  |
| I find that my values and the organization’s values are very similar |  |  |  |  |  |  |
| I am proud to tell others that I am part of this organization |  |  |  |  |  |  |

| This organization really inspires the very best in me in the way of job performance |  |  |  |  |  |  |
| I am extremely glad that I chose this organization to work for over others I was considering at the time I joined |  |  |  |  |  |  |
| I really care about the fate of this organization |  |  |  |  |  |  |
Part 4 Turnover Intention

Listed below are several statements which may represent your attitudes, intentions, feelings, and thoughts that you may have related to your current position with Ohio State University Extension and the Extension Organization in general. Please rate each statement choosing only one number that best describes your perceptions and feelings on a scale from 1 = Strongly Disagree to 7 = Strongly Agree. If you do not know how to answer a question you may select “N/A”.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Moderately Disagree</th>
<th>Slightly Disagree</th>
<th>Neither Agree Nor Disagree</th>
<th>Slightly Agree</th>
<th>Moderately Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Neither Agree Nor Disagree</th>
<th>Slightly Agree</th>
<th>Moderately Agree</th>
<th>Strongly Agree</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>I will <strong>actively</strong> look for a new job in the next year</td>
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<tr>
<td>I often think about leaving the organization</td>
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<tr>
<td>I will <strong>probably</strong> look for a new job in the next year</td>
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</tr>
</tbody>
</table>
Part 5 Demographics

What is your gender?
- Male
- Female

What is your age?

What is the highest level of education you have completed?
- High school diploma (includes equivalency)
- Some college, no degree
- Associate’s Degree
- Bachelor’s Degree
- Master’s Degree
- PhD Degree
- Other advanced degree beyond a Master's Degree

What is your marital status?
- Single
- Married
- Divorced
- Widowed
- Domestic partner
Do you have children living at home under age 18?

- Yes
- No

How many years have you been employed by OSU Extension?


To what program area do you report based on the major portion of your time allocated? (Please check one):

- Agricultural and Natural Resources
- 4-H Youth Development
- Community Development
- Family and Consumer Sciences
- Other

Please note that clicking the >> button below will submit your survey responses.
Appendix F: Behavioral Institutional Review Board Approval
01/05/2017

Study Number: 2016B0460
Study Title: Examining the Ohio State University Extension Program Assistants’ Turnover Intention through Job Satisfaction, Satisfaction with Supervisor, and Organizational Commitment.

Type of Review: Amendment #1

Review Method: Expedited

Request to amend the research dated December 13, 2016 (revise the protocol, consent form and recruitment emails to reflect the updated confidentiality and privacy information for consistency and accuracy purposes, update incentive information to reflect that the researcher not a system will randomly select winners).

Date of IRE Approval: 01/03/2017
Date of IRE Approval Expiration: 12/06/2017

Dear Scott Scheer,

The Ohio State Behavioral IRB APPROVED the above referenced research.

As Principal Investigator, you are responsible for ensuring that all individuals assisting in the conduct of the study are informed of their obligations for following the IRB-approved protocol and applicable regulations, laws, and policies, including the obligation to report any problems or potential noncompliance with the requirements or determinations of the IRB. Changes to the research (e.g., recruitment procedures, advertisements, enrollment numbers, etc.) or informed consent process must be approved by the IRB before implemented, except where necessary to eliminate apparent immediate hazards to subjects.

This approval is issued under The Ohio State University’s OHRP Federalwide Assurance #00006378 and is valid until the expiration date listed above. Without further review, IRB approval will no longer be in effect on the expiration date. To continue the study, a continuing review application must be approved before the expiration date to avoid a lapse in IRB approval and the need to stop all research activities. A final study report must be provided to the IRB once all research activities involving human subjects have ended.
Records relating to the research (including signed consent forms) must be retained and available for audit for at least 5 years after the study is closed. For more information, see university policies, Institutional Data and Research Data.

Human research protection program policies, procedures, and guidance can be found on the ORRP website.

[Signature]

Dariel Strunk, PhD, Chair
Ohio State Behavioral IRB
Appendix G: Letter of Support from OSU Extension Director
September 20, 2016

Office of Responsible Research Practices
1960 Kenny Road
Columbus, OH 43210

RE: Windon Dissertation Research Proposal

To Whom It May Concern:

I am writing to share my support of Suzanna Windon's dissertation research titled, "Examining the Ohio State University Extension Program Assistants' Turnover Intention through Organizational Commitment, Job Satisfaction, and Satisfaction with Supervisor." Windon is conducting the research under the guidance of Dr. Graham Cochrane in the Department of Agricultural Communication, Education, and Leadership.

I have met with Suzanna to discuss her research and understand that her study will include collecting demographic data from the Human Resources database (names, e-mails, age, gender, highest degree earned, years of OSU service, and program areas) for Extension program assistants. The Extension program assistants will be contacted via e-mail and invited to participate in a voluntary study by completing an online survey. The survey asks study participants their feelings, perceptions, and attitudes toward organizational commitment, job satisfaction, satisfaction with supervisor, and turnover intention.

Again, I am supportive of this research being conducted in OSU Extension and look forward to learning from the results of Suzanna's study.

Respectfully,

Roger Rennekamp, PhD
Associate Dean and Director, OSU Extension
Appendix H: E-mail Communication with Study Participants
A pre-notification e-mail from OSU Extension Director - Dr. Roger Rennekamp

Sent: January 9, 2017  
To: [individual’s name.#@ osu.edu]  
From: Dr. Roger Rennekamp  
Subject: OSU Extension Program Assistant Turnover Intention Study

Colleagues,
I am writing to inform you about an invitation you will receive soon to participate in research being conducted by Suzanna Windon, a doctoral candidate in the Department of Agricultural Communication, Education, and Leadership at OSU. Suzanna is conducting a study to examine factors that influence Extension program assistants’ turnover intention. Because of the important role that you and all our program assistants play in implementing Extension programming, I am supportive of her research, look forward to seeing the results, and plan to use what we learn to help improve organizational and human resource practices.
In a few days, you will receive an email request from Suzanna where she will ask your participation in her dissertation research study. This is a voluntary study; however your opinion is very valuable and your contributions will be confidential if you choose to participate.
Your participation is extremely important in this research process, so please consider contributing your insights in this doctoral research study.
Respectfully,
Roger Rennekamp, PhD  
Professor and Associate Dean and Director, OSU Extension

A pre-notification e-mail (from researcher)

Sent: January 10, 2017  
To: [individual’s name.#@ osu.edu]  
From: windon.9@osu.edu  
Subject: OSU Extension Program Assistants Turnover Intention Study

Greetings!
My name is Suzanna Windon. I am a doctoral candidate in the department of Agricultural Communication, Education, and Leadership at OSU. I am conducting research to examine factors that affect Extension program assistants’ turnover intention. The results of this study will help to improve organizational and human resource practices toward retention of Extension program assistants.
In a few days, you will receive an e-mail a request to participate in my study “Examining the Ohio State University Extension Program Assistant Turnover Intention through Job Satisfaction, Satisfaction with Supervisor, and Organizational Commitment. Participation in this study is completely voluntary.
Your input in this study will help us to better understand the relationship among job satisfaction, satisfaction with supervisor, organizational commitment, and employee turnover intention among Extension program assistants. Your participation is very valuable for this research, please consider participating in this study.

Many Thanks,

Suzanna Windon
Doctoral Candidate, Department of Agricultural Communication, Education, and Leadership
The Ohio State University
E-mail: Windon.9@osu.edu
Phone: 614-271-7442

**Turnover Intention Survey – Research Study Invitation E-mail**

Sent: January 11, 2017
To: [individual’s name.#@ osu.edu]
From: windon.9@osu.edu via qualitrics.com
Subject: Invitation – OSU Extension Program Assistants Turnover Intention Study

Greeting!

This week you received the pre-notification letter inviting you to participate in my study “Examining the Ohio State University Extension Program Assistants Turnover Intention through Job Satisfaction, Satisfaction with Supervisor and Organizational Commitment”. I am conducting this dissertation research in collaboration with Dr. Scott Scheer. The data provided by respondents will offer OSU Extension administrators a better understanding of factors that influence an individual’s intention to leave the organization. Comprehending those factors will help improve organizational and human resource practices toward retention of Extension employees.

Your privacy is important! All your responses will be maintained on a secure OSU Qualtrics server. Only researchers and the Institutional Review Board (IRB) at OSU will have access to your data. Every effort will be made to keep your responses confidential, however, no guarantee can be given while using the web-survey. There are minimum risks of harmful actions against you, your reputation, and your relationship with OSU Extension now or in the future.

This survey will take about 15–20 minutes to complete. If you do not know how to answer a question you may select “N/A”. Collected data will be used for research purpose only. None of your individual responses will be shared with administrators. After the research will be finished all identifiers like your e-mail address will be permanently
removed from the data and destroyed. All information will be grouped with other participants and reported as aggregated data for the further statistical analysis.

All participants who will provide consent to participate in this study will be automatically entered into a drawing for one of eight (8) $25 gift cards (not purchased with OSU funds). Odds to win are approximately 1:22, with the potential to be lower based on the total number of people who participate in this study. The researcher will randomly draw the winners and we will contact you via e-mail after the survey is closed. All participants are eligible to win (not just those that complete all questions). By law, payments to subjects are considered taxable income.

Participation is voluntary and you may withdraw answering questions at any point in time. You may refuse to participate in this study without penalty or loss of benefits to which you are otherwise entitled. Your decision will not affect your current and future relationship with OSU in any way. You can access the survey by clicking the link below. Follow this link to the Survey:

Or by using your Internet browser copy and paste the questionnaire URL http:// (Please note: The link provided above tied to your e-mail and this questionnaire. Please do not forward this message).

Please complete the survey by January 27, 2017.

We very much appreciate your input with this survey and thank you in advance.

Suzanna Windon & Dr. Scott Scheer

If you have any question, concern, or complaints about research, or feel you have been harmed by taking part in the study, feel free to contact Suzanna R. Windon at (614)-271-7442 / windon.9@osu.edu or Dr. Scott Scheer at (614)-292-6758 / scheer.9@osu.edu.

For questions about your rights as a research participant, or to speak with someone who is not a member of the research team, you may contact Ms. Sandra Meadows in the Office of Responsible Research Practices at 1-800-678-6251. Participant is giving permission for the researcher to use the collected data for research purpose by completing the electronic survey.

Turnover Intention Survey – 1st Reminder Letter

Sent: January 17, 2017
To: [individual’s name.#@ osu.edu]
From: windon.9@osu.edu via qualtrics.com
Subject: OSU Extension Program Assistants Turnover Intention Study

Greetings!
Last Thursday, January 27, 2017, you received a request that asked for your participation in the OSU Extension program assistant turnover intention study. I am sending this gentle reminder because we care to hear from many employees as possible, so that we can be sure that results of this study represents the perceptions, experiences, and opinions of Extension program assistants in Ohio.
The purpose of this survey is to investigate factors that influence Extension program assistants’ turnover intention. The results of this study will help to improve human resource practices toward retention of Extension program assistants. The survey will take about 15-20 minutes to complete the survey.
Every effort will be made to keep your responses confidential. Participation is voluntary and participants may withdraw answering questions at any point in time. All information will be grouped with other participants and reported as aggregated data for research purpose only.
You can access the survey by clicking the link below or by using your Internet browser copy and paste the questionnaire URL.
http://
(Please note: The link provided above tied to your e-mail and this questionnaire. Please do not forward this message).
All participants who will provide consent to participate in this study will be automatically entered into a drawing for one of eight $25 gift cards. Odds to win are approximately 1:22, with the potential to be lower based on the total number of people who participate in this study. The researcher will randomly draw the winners and we will contact you via e-mail after the survey is closed. All participants are eligible to win (not just those that complete all questions).

Please complete the survey by January 27, 2017.

We very appreciate your help with this survey and thank you in advance.
Suzanna Windon & Dr. Scott Scheer

If you have any question, concern, or complaints about research, or feel you have been harmed by taking part in the study, feel free to contact Suzanna R. Windon at (614) 271-7442 / windon.9@osu.edu; Dr. Scott Scheer at (614)-292-6758 / Scheer.9@osu.edu. For questions about your rights as a research participant, or to speak with someone who is not a member of the research team, you may contact Ms. Sandra Meadows in the Office of Responsible Research Practices at 1-800-678-6251.

Turnover Intention Survey – 2nd Reminder Letter
Sent: January 19, 2017
To: [individual’s name.#@ osu.edu]
From: windon.9@osu.edu via qualitrics.com
Subject: OSU Extension Program Assistants Turnover Intention Study

Greetings!
Recently, on January 11, 2017, we sent you an e-mail that asked for your participation in the Turnover Intention study that examine the relationship among organizational commitment, job satisfaction, satisfaction with supervisor, and employee turnover intention involving Extension program assistants in Ohio. If you have not completed this survey, we are sending this gentle reminder because we hope to hear from as many employees as possible to be sure that results of this study represent the perceptions, experiences, and opinions of Extension program assistants in Ohio. The results of this study will help improve human resource practices toward retention of Extension employees.
It will take about 15-20 minutes to complete the survey.
Every effort will be made to keep your responses confidential. Participation is voluntary and participants may withdraw answering questions at any point in time. All information will be grouped with other participants and reported as aggregated data for research purpose only.
You can access the survey by clicking the link below or by using your Internet browser copy and paste the questionnaire URL.
http://
(Please note: The link provided above tied to your e-mail and this questionnaire. Please do not forward this message).
All participants who will provide consent to participate in this study will be automatically entered into a drawing for one of eight (8) $25 gift cards. The researcher will randomly draw the winners and we will contact you via e-mail after the survey is closed. All participants are eligible to win (not just those that complete all questions).

We very much appreciate your help with this survey and thank you in advance.
Please complete the survey by January 27, 2017.

Suzanna Windon & Dr. Scott Scheer

*If you have any question, concern, or complaints about research, or feel you have been harmed by taking part in the study, feel free to contact Suzanna R. Windon at (614) 271-7442 / windon.9@osu.edu or Dr. Scott Scheer at 614-292-6758 / scheer.9@osu.edu.*
For questions about your rights as a research participant, or to speak with someone who is not a member of the research team, you may contact Ms. Sandra Meadows in the Office of Responsible Research Practices at 1-800-678-6251.

**Turnover Intention Survey – 3rd Reminder Letter**
Sent: January 24, 2017
To: [individual’s name.#@ osu.edu]
Greetings!
We need your help!
In January 11, 2017 you received an e-mail from Ms. Suzanna Windon who requested for your participation in the OSU Extension Turnover Intention study on about your perceptions on job satisfaction, satisfaction with supervisor, organizational commitment, and turnover intention.
If you have not taken a survey yet, I would like to strongly encourage you to complete the questionnaire so as to ensure the results of this study are as precise as possible. Your input is very important for this research. Results will help improve organizational and human resource practices toward retention of OSU Extension program assistants. Suzanna asked you to fill out the questionnaire. Please take a few minutes to complete the survey. Every effort will be made to keep your responses confidential. Participation is voluntary and participants may withdraw answering questions at any point in time.
If you choose to participate in this research study, please click on the link below or by using your Internet browser copy and paste the questionnaire URL.
http://
(Please note: The link provided above tied to your e-mail and this questionnaire. Please do not forward this message).
Thank you for your help with this dissertation project.

Respectfully,

Roger Rennekamp
Associate Dean and Director, OSU Extension
College of Food, Agricultural and Environmental Sciences Extension Administration
Room 3, Ag. Administration Building
2120 Fyffe Road, Columbus, OH 43210
Phone: 614-292-7614
Fax: 614-688-3807
Website: [http://extension.osu.edu](http://extension.osu.edu)
Email: rennekamp.3@osu.edu
We hope this email finds you in good health and spirit. We are writing to follow-up on the e-mail from <date>, asking you to participate in voluntary study “Examining the Ohio State University Extension Program Assistants’ Turnover Intention through Job Satisfaction, Satisfaction with Supervisor Organizational Commitment”.

The results of this study will help improve organizational and human resource practices toward retention of Extension program assistants. This is the final reminder we are sending about this research. We want to hear your opinion because it is very important for us. Your contribution is indispensable will help minimize researcher’s biases while proceeding with data analysis. Every effort will be made to keep your responses confidential. Participation is voluntary and participants may withdraw answering questions at any point in time. You may refuse to participate in this study without penalty or loss of benefits to which you are otherwise entitled. All information will be grouped with other participants and reported as aggregated data for research purpose only. Please allocate 15-20 minutes of your time and participate in this study.

If you are interested in participating, please proceed with the questionnaire using the following link or please use your Internet browser copy and paste the questionnaire URL. http:// (Please note: The link provided above tied to your e-mail and this questionnaire. Please do not forward this message).

Please complete the survey by January 27, 2017.

All participants who will provide consent to participate in this study will be automatically entered into a drawing for one of eight (8) $25 gift cards. Odds to win are approximately 1:22, with the potential to be lower based on the total number of people who participate in this study. The researcher will randomly draw the winners and we will contact you via e-mail after the survey is closed. All participants are eligible to win (not just those that complete all questions).

Thank you and we are very appreciate your help.
Suzanna Windon & Dr. Scott Scheer

If you have any question, concern, or complaints about research, or feel you have been harmed by taking part in the study, feel free to contact Suzanna R. Windon at (614) 271-7443/Widon.9@osu.edu; Dr. Scott Scheer at 614-292-6758/Scheer.9@osu.edu.

For questions about your rights as a research participant, or to speak with someone who is not a member of the research team, you may contact Ms. Sandra Meadows in the Office of Responsible Research Practices at 1-800-678-6251.
Appendix I: Bivariate Correlations Matrix among Turnover Intention, Age, Years of Services, Gender, Children Living at Home Under 18, Education, Program areas, and Marital Status
Bivariate Correlations Matrix among Turnover Intention, Age, Years of Services, Gender, Children Living at Home Under 18, Education, program areas, and Marital Status

<table>
<thead>
<tr>
<th>Measure</th>
<th>Age</th>
<th>Years of Services</th>
<th>Gender</th>
<th>Children at Home</th>
<th>Education</th>
<th>Program areas</th>
<th>Marital status</th>
<th>TI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Years of Services</td>
<td>.637*</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(p &lt; .001</td>
<td>n = 140)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>.148</td>
<td>.086</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(p = .083</td>
<td>n = 147)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Children at Home</td>
<td>.066</td>
<td>.130</td>
<td>-.118</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(p = .436</td>
<td>n = 140)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>-.459*</td>
<td>-.467*</td>
<td>.200</td>
<td>.236</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(p &lt; .001</td>
<td>n = 140)</td>
<td>(p &lt; .001</td>
<td>n = 140)</td>
<td>(p &lt; .001</td>
<td>n = 146)</td>
<td>(p = .084</td>
<td>n = 146)</td>
</tr>
<tr>
<td>Program areas</td>
<td>-.051</td>
<td>-.297*</td>
<td>.232*</td>
<td>.118</td>
<td>.050</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(p = .549</td>
<td>n = 140)</td>
<td>(p &lt; .001</td>
<td>n = 146)</td>
<td>(p &lt; .001</td>
<td>n = 146)</td>
<td>(p = .493</td>
<td>n = 147)</td>
</tr>
<tr>
<td>Marital status</td>
<td>.313*</td>
<td>.129</td>
<td>.280*</td>
<td>.354*</td>
<td>-.153*</td>
<td>0.83</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(p &lt; .001</td>
<td>n = 140)</td>
<td>(p &lt; .001</td>
<td>n = 146)</td>
<td>(p &lt; .001</td>
<td>n = 147)</td>
<td>(p = .039</td>
<td>n = 147)</td>
</tr>
<tr>
<td>Turnover Intention</td>
<td>-.298*</td>
<td>-.249*</td>
<td>.329</td>
<td>.341</td>
<td>.340</td>
<td>.292</td>
<td>.382</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>(p &lt; .001</td>
<td>n = 140)</td>
<td>(p = .003, n = 134)</td>
<td>(p = .577, n = 141)</td>
<td>(p = .573</td>
<td>n = 141)</td>
<td>(p = .563</td>
<td>n = 142)</td>
</tr>
</tbody>
</table>

Note. *Correlation is significant at the .05 level

The following correlation coefficients were calculated depending on variables’ level of measurement: Pearson’ product-moment correlation coefficients, Spearman rank-order correlations, Phi and Cramer’s V correlations