AN EXAMINATION OF THE PROFESSIONAL IDENTITY,
WORK ENGAGEMENT, AND JOB SATISFACTION
OF HIGHER EDUCATION STAFF MEMBERS

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AN EXAMINATION OF THE PROFESSIONAL IDENTITY, WORK ENGAGEMENT, AND JOB SATISFACTION OF HIGHER EDUCATION STAFF MEMBERS

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Dr. Vicki Rosser, Dissertation Supervisor

ABSTRACT

Staff members are a large and growing set of employees within higher education (U.S. Department of Education, 2008). This growth coincides with increased public concern about higher education, which has affected salaries and working conditions (Johnsrud, 2002). Despite these changes, limited research exists on the work lives of higher education staff members. The purpose of this study is to explore the relationships among staff members’ work life perspectives, identity issues, demographic and profile characteristics, work engagement, and job satisfaction. The conceptual framework drew upon work engagement (Kahn, 1990) and job satisfaction (Rosser, 2004) literature.

The results of the study were based on 178 responses to a survey instrument administered to staff members working at a Midwestern, public, research university (Carnegie, n.d.). Data analysis included using descriptive statistics, t-tests, ANOVAs, correlation coefficients, Principal Components Analysis, and multiple regression analysis. Results indicated that staff members were positive about their work relations yet less positive about their working conditions and networks but differences existed in responses by some demographic and profile characteristics. Furthermore, work engagement and job satisfaction were distinct but related constructs that were explained by both work life and identity indicators. The findings shed light on the factors that explain the work engagement and job satisfaction of higher education staff members.
CHAPTER ONE

OVERVIEW

Colleges and universities are labor-intensive organizations (Johnsrud, 2002). In fact, in 2005 over 3.5 million individuals were employed in higher education institutions (U.S. Department of Education, 2008). Of those employees, 58% were professional and nonprofessional staff members rather than faculty members or instruction/research staff (U.S. Department of Education, 2008). While the number of staff members on campus is impressive, what is even more noteworthy is that this population is growing in size. In 1993, non-academic professional and nonprofessional staff members were 48% of the employees on campus but by 2006 they had grown to 58% of the employees (U.S. Department of Education, 2008, 1996).

While some might see administrative expansion as increased bloat and bureaucracy, the literature on higher education staff members attributes the growth to factors external and internal to the institution. Externally, state and federal regulations are requiring increased reporting and accountability, thereby creating the need for additional administrative positions on campus in areas such as institutional research, government relations, and sponsored program offices (Scott, 1978). Internally, faculty members and senior administrators are seeking assistance with tasks that they no longer have time to accomplish particularly in student service areas (e.g., veteran’s services, minority students services, career services, international student services) (Scott, 1978).

Yet, at a time of increased responsibilities and requirements, there is also increased public concerns about “rising costs, the seeming lack of attention to
undergraduate education, and the sometimes irrelevance of research” (Johnsrud, 2002, p. 380). These concerns have resulted in “strained budgets … which have an impact on salaries and working conditions” (Johnsrud, 2002, p. 380).

Thus, the situation is such that there is a large group of campus employees who are taking on additional roles and responsibilities yet, at the same time, are seeing a decline in their working conditions. Given this situation, it is understandable that institutions are seeking ways to motivate employees while at the same time increase productivity. One line of job-related literature, engagement research, may help meet these sometimes conflicting goals of increased motivation and productivity.

Employee engagement research has focused on identifying the antecedents and consequences of engaged employees. Engaged employees are described as having “a sense of energetic and effective connection with their work activities” and being “able to deal well with the demands of their job” (Schaufeli & Salanova, 2007). When employees are engaged, they are physically, mentally, and emotionally occupied in their work (Kahn, 1990). Possible consequences of engagement for an organization include increased customer satisfaction, increased profit, increased productivity, decreased turnover, and higher job safety scores (Harter, Schmidt, & Hayes, 2002). For individuals, possible consequences of engagement include a greater ability to mobilize job resources (e.g., improve their job), greater recovery from the previous day’s work, and a greater sense of self-efficacy (Schaufeli & Salanova, 2007).

Job satisfaction is another work-related concept that is explored as institutions seek ways to increase motivation and productivity. Job satisfaction is defined as one’s
feelings toward one’s job, and higher job satisfaction is linked to lower turnover intentions, among other outcomes (Rosser, 2004).

The job satisfaction literature within higher education is robust compared to the literature on work engagement. Unfortunately the higher education literature has not yet examined engagement and thus the relationship between engagement and satisfaction within higher education is not yet well understood.

However, the relationship between engagement and satisfaction has been examined in engagement research. A limited number of studies found that engagement was an antecedent of job satisfaction (Saks, 2006; Schaufeli & Salanova, 2007). Thus, increasing engagement could in turn increase job satisfaction.

Yet, the professional literature argued that engagement and satisfaction are two distinct constructs that coexist at the same time within an employee. So, for example, an employee can be highly satisfied yet not engaged or be highly engaged but not satisfied (Gostick & Elton, 2007). In essence, this literature argued that assessments can place employees on a satisfaction – engagement matrix. Employees’ placement on the matrix indicates their attitudes toward their work. For example, highly engaged and highly satisfied employees are high achievers who are “committed to personal and organizational success” (Gostick & Elton, 2007, p. 83). In contrast, employees with low engagement and satisfaction are “vocal in their critiques of the organization,” are a “threat” to the organization, and have a high risk of turnover (Gostick & Elton, 2007, p. 83). Understanding employee engagement as well as satisfaction can help organizations identify the factors that created each outcome and thus generate a win-win for both employees and organizations.
The benefits of understanding engagement and satisfaction are particularly attractive given the situation facing higher education staff members, as described above. Thus, studying these work issues could provide useful information to help colleges and universities effectively manage their workforce in today’s climate and to help employees effectively manage their attitude toward their jobs during a time of increasing responsibilities and changing work environments.

Conceptual Framework

Kahn’s (1990) theory on engagement provided the conceptual framework for this study. According to Kahn (1990), engagement was “the harnessing of organization members’ selves to their work roles” so that they “employ and express themselves physically, cognitively, and emotionally during role performances” (Kahn, 1990, p. 694). Kahn (1990) argued that “people can use varying degrees of their selves, physically, cognitively, and emotionally, in the roles they perform … the more people draw on their selves to perform their roles …, the more stirring are their performances and the more content they are with the fit of the costumes they don” (p. 692). In his research, Kahn (1990) found that “work contexts, mediated by people’s perceptions, create the conditions in which they personally engage and disengage” (p. 695).

Kahn’s (1990) qualitative research study found that engagement was related to three psychological concepts: meaningfulness, safety, and availability. As clarified by May, Gilson and Harter (2004), an employee’s level of engagement depended on his/her answers to the following questions “(i) How meaningful is it for me to bring myself into this performance; (ii) How safe is it to do so; and (iii) How available am I to do so?” (p. 14). In answering these questions, employees considered elements in their work lives. To
assess meaningfulness, employees looked at issues such as the task characteristics, role characteristics, and work interactions. Safety was assessed by factors such as interpersonal relationships, group dynamics, management style, and organizational norms. Availability was gauged by an employee’s physical and emotional availability, level of self-consciousness, and involvement in outside activities. Thus, it was the work contexts along with individual characteristics that led to engagement.

Kahn’s work was later used as the framework for quantitative studies by May et al. (2004) and Saks (2006) who both surveyed employees to determine if Kahn’s (1990) theoretical framework was supported by the data they collected. While their final theoretical models revised Kahn’s (1990) proposed model, their findings supported Kahn’s overall idea that work contexts and psychological factors influence engagement (May et al., 2004; Saks, 2006).

This study sought to build on the work of Kahn (1990), May et al. (2004), and Saks (2006) by examining the factors that explained engagement. However, rather than look at the psychological factors that influence an employee’s level of engagement, this study incorporated sociological perspectives. Sociological theories of role identity emphasize the importance of meaningfulness, which tied to Kahn’s (1990) area of emphasis. However, role identity theories argued that role embracement, which was similar to engagement, was a result of identity issues such as work-role fit, job-ability fit, and social support. Thus, this study incorporated these issues into the study’s instrument. The theoretical framework for this study is described in further detail in Chapter Two.

In addition to adapting Kahn’s (1990) framework to include sociological perspectives, this study also built on the work of Rosser (2004) in her studies of the job
satisfaction of university midlevel administrators. Her research indicated that work life issues along with demographic and profile characteristics were related to job satisfaction. The research was grounded in the theoretical framework of Lawler (1994) who argued that job satisfaction stemmed from satisfaction with particular job facets (i.e., work life perceptions) as well as an overall assessment of the job. Employees’ overall level of satisfaction “is determined by the difference between all the things a person feels [he/she] should receive … and all the things [he/she] actually does receive (Lawler, 1994, p. 99). Thus, according to this theory, there is a relationship between satisfaction levels with job facets and one’s overall job satisfaction level. This theory was similar to Kahn’s findings in the engagement study, which indicated that work contexts influenced engagement.

Thus, this study drew upon the basic framework provided by Kahn (1990) and the model provided by Rosser (2004) to explore the relationships among identity, work life issues, demographic and profile characteristics, work engagement and job satisfaction. Below is a figure depicting the two conceptual models proposed for this study.
Literature Review

Researchers are interested in understanding the factors that influence employees’ perceptions of or involvement with their jobs. Within the higher education arena, many studies have focused on the factors that contribute to an employee’s job satisfaction. Outside of higher education, new research has focused on the factors that contribute to an employee’s engagement. Thus, the literature review for this study examined both the higher education staff member job satisfaction literature as well as the engagement literature to ascertain the issues that influenced job satisfaction and work engagement.

Higher Education Staff Members’ Job Satisfaction Literature

The literature on higher education staff members indicated that there were many work life and identity issues as well as demographic and profile characteristics that influenced job satisfaction and morale (i.e., “job satisfaction”). Work life issues, in particular, have been examined extensively in higher education job satisfaction research. The research identified several work life concerns. These concerns included responsibility without authority (Johnsrud, 1996; Rosser, 2000, 2004; Scott, 1978), lack of recognition (Johnsrud, 1996; Johnsrud & Rosser, 1999; Johnsrud, Heck, & Rosser, 2000; Rosser, 2000, 2004; Scott, 1978), advancement opportunities (Johnsrud, 2004; Johnsrud et al., 2000; Johnsrud & Rosser, 1999; Rosser, 2000; Scott, 1978), training and development (Johnsrud et al., 2000; Scott, 1978), and professional association orientation (Scott, 1978).

Issues related to identity have been addressed in the higher education literature albeit not termed “identity issues” in the research. These issues included community (i.e., teamwork versus interpersonal conflict) as well as discrimination (Austin, 1985; Johnsrud...

Demographic and profile characteristics related to staff members’ job satisfaction included both individual and institutional issues. Individual factors that were related to job satisfaction included age (Volkwein & LaNasa, 1999; Volkwein & Parmley, 2000), length of service (Volkwein & Zhou, 2003), administrative rank (Volkwein & LaNasa, 1999; Volkwein & Parmley, 2000; Volkwein & Zhou, 2003), administrative unit (Volkwein & LaNasa, 1999; Volkwein & Parmley, 2000; Volkwein & Zhou, 2003), salary (Austin, 1985; Johnsrud & Rosser, 1999; Rosser & Javinar, 2003), gender (Austin, 1985; Johnsrud et al., 2000; Johnsrud & Rosser, 1999; Rosser & Javinar, 2003; Volkwein & LaNasa, 1999; Volkwein & Parmley, 2000; Volkwein & Zhou, 2003), race/ethnicity (Johnsrud & Rosser, 1999), and minority status (Rosser, 2004; Rosser & Javinar, 2003). An institutional factor that was related to job satisfaction was institutional type, with community college employees being more satisfied than those employed in a research university or liberal arts college (Johnsrud et al., 2000).

**Employee Engagement Literature**

Similar to the higher education job satisfaction literature, the engagement literature identified a number of work life and identity issues as well as demographic and profile characteristics that influenced an employee’s level of engagement. While the engagement literature was not as extensive as the higher education job satisfaction
literature, nor had it yet expanded to include studies conducted within higher education, it was still helpful to identify the factors that influence an employee’s level of engagement with the assumption that these factors also apply to the higher education environment. Each of these issues is discussed below.

Similar to higher education job satisfaction research, work life factors were the focus of most engagement studies. Factors found to influence employee engagement include autonomy and control (Bakker, Hakanen, Demerouti, & Xanthopoulou, 2007; Harter et al., 2002; Kahn, 1990; Llorens, Bakker, Schaufeli & Salanova, 2006; May et al., 2004; Saks, 2006), job characteristics (Harter et al., 2002; Kahn, 1990; Llorens et al., 2006; May et al., 2004; Saks, 2006), organizational norms (Bakker et al., 2007; Harter et al., 2002; Kahn, 1990), and professional development opportunities (Harter et al., 2002).

Two issues related to identity were addressed in the engagement literature. The two issues were work-role fit (Harter et al., 2002; Kahn, 1990; May et al., 2004) and positive interpersonal relationships with supervisors, colleagues, and/or customers (Bakker et al., 2007; Harter et al., 2002; Kahn, 1990; Llorens et al., 2006; May et al., 2004).

In terms of demographic and profile characteristics, engagement research has shown that age, gender and occupational type were related to engagement (Schaufeli, Bakker & Salanova, 2006). Yet, concerning the age and gender issues, the studies indicated that the relationship between those issues and engagement was so small or inconclusive that researchers considered them to be unimportant findings (Schaufeli, Bakker & Salanova, 2006). Occupational type, however, was an important finding.
Indeed, studies indicated that managers had higher levels of engagement than blue-collar workers (Schaufeli et al., 2006).

To summarize the literature, a number of job satisfaction studies have been conducted with higher education staff members. These studies have yielded important data about the factors that contribute to job satisfaction. Likewise, engagement research identified factors that affect employee engagement levels. While the engagement research was not as robust as the higher education job satisfaction literature, one can still find similarities in the two bodies of literature. Indeed, both bodies of literature found that specific work life and identity issues as well as demographic and profile characteristics influenced an employee’s reaction to his/her job.

Purpose of the Study

The purpose of this study was to examine the relationships among work life perceptions, identity, demographic and profile characteristics, work engagement, and job satisfaction. By examining these relationships, the research identified the factors that may influence the job satisfaction and work engagement of university staff members.

Research Questions

1. What work life items are most important to staff members?
2. Do work life perceptions of staff members vary by their demographic and profile characteristics?
3. How are the constructs of work engagement and job satisfaction defined and measured?
4. What are the relationships among the domains of work life perceptions, identity, work engagement, and job satisfaction?
5. What are the demographic and profile characteristics, work life perceptions, and identity issues that explain work engagement and job satisfaction (using two regression models)?

Research Design

This study examined the relationships among work life perceptions, identity, demographic and profile characteristics, work engagement, and job satisfaction by analyzing higher education staff members’ responses to a survey instrument. The survey instrument used in the study was adapted and modified from instruments used in research by Rosser and her colleagues (c.f., Rosser, 2004; Rosser, Hermsen, Mamiseishvili & Wood, 2007; Rosser & Javinar, 2003). Adaptations and modifications were based on three sources including a thorough review of the literature, a comparison between Rosser’s job satisfaction instrument and engagement instruments, and input from staff members at the institution endorsing the study. A more detailed explanation of the adaptations and modifications can be found in Chapter Three.

The survey items were presented on a Likert scale, with the work life perceptions and identity items being on a five-point scale and the job satisfaction and work engagement items being on a seven-point scale. Information on demographic and profile characteristics were collected to determine whether differences in work life perceptions, work engagement, and job satisfaction existed among individuals.

The survey was distributed in March 2008 to employees working within two organizational units at one institution. All of the approximately 300 staff members working within the two units were surveyed for this study and 170 surveys were returned.
and considered usable. The institution is a four-year, public Midwestern university with approximately 14,000 students (Carnegie, n.d.).

The survey was designed, distributed, and collected according to the recommendations outlined by Dillman (2007) in his Tailored Design Method. The survey was distributed over the Internet using a commercially available survey tool (e.g., Survey Monkey) and thus there was a risk of a lower response rate (Dillman, 2007). Therefore, it was important that the design, distribution, and collection followed Dillman’s (2007) recommendations as much as possible in order to secure as many survey responses as possible. For Internet surveys, the Tailored Design Method called for developing visually appealing surveys that worked on multiple computer configurations. Furthermore, Dillman’s method recommended multiple contacts with survey participants within a specified time frame. As outlined in Chapter Three, the majority of Dillman’s (2007) recommendations were followed during the implementation of this survey.

Data analysis included the presentation of descriptive statistics of the survey respondents as well as for constructs and items. Furthermore, the data were assessed for differences in responses according to demographic and profile characteristics. Next, statistical analyses were used to define and measure the constructs of work engagement and job satisfaction. Correlations among the constructs were also assessed. Finally, two multiple regression models, one for work engagement and the other for job satisfaction, were created to determine which demographic and profile characteristics, work life perceptions, and identity issues explain work engagement and job satisfaction.
Definitions

Absorption. Absorption is defined as “being full concentrated and engrossed in one’s work” (Schaufeli, Salanova, Gonzalez-Roma, & Bakker, 2002).

Dedication. Dedication refers to “a sense of significance, enthusiasm, inspiration, pride and challenge” (Schaufeli et al., 2002). It is considered to be the opposite of cynicism (Schaufeli et al., 2002).

Engagement. Engagement is a “positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption” (Schaufeli et al., 2002, p. 74).

Identity. “One’s sense of self … which is largely grounded in the perceptions of others” (Ashforth, 2001, p. 26).

Job-ability fit. Job-ability fit is the “extent to which the individual’s ability and competence were matched with [his/her] job” (Abdel-Halim, 1981, p. 553).

Job satisfaction. Job satisfaction reflects one’s feelings toward one’s job and is measured by “variety in the job, enjoyment of the job, input in matters that affect job, freedom on the job, trust and confidence in colleagues, satisfaction with work responsibilities, salary compensation is fair, and an overall self-report of … satisfaction” (Rosser, 2004, p. 325).

Social support. Social support refers to the emotional and instrumental support an employee perceives is available from supervisors, coworkers, relatives or friends (Fields, 2002).

Staff members. Non-academic employees employed full-time at the institution.

Vigor. Vigor is defined as “high levels of energy and mental resilience while working, the willingness to invest effort in one’s work, and the persistence even in the
face of difficulties” (Schaufeli et al., 2002, p. 74). Vigor is seen as the opposite of exhaustion (Schaufeli et al., 2002).

*Work life perceptions.* An employee’s satisfaction with issues that are related to his/her work, including career support (e.g., access to training, clear performance criteria), recognition for competence (e.g., recognition, autonomy), intra-departmental relations (e.g., sense of teamwork, good communication), work resources (e.g., adequate resources, salary), and external relations (e.g., relationships with faculty, staff, students, leadership) (Rosser, 2004).

*Work-role fit.* Work-role fit is “individuals’ perceived fit with their jobs and self-concept” (May et al., 2004, p. 21).

**Limitations**

There were several limitations to this study, including that it was limited to a sub-set of the employees working at one institution. Thus, the findings were not generalizable to other units within the institution or other institutions. In addition, surveying a sub-set of the institution limited the number of employees asked to completed the survey and thus this survey had a relatively small population size. Furthermore, there was a risk that respondents, the institution’s employees, may have chosen not to participate in the survey or skewed their responses because the study was endorsed by the employer. Another limitation was that these data gathered represented a “snap-shot” of the employees’ perceptions in that it was not a longitudinal study and thus it was not known how an employee’s perceptions may change over time. Finally, as in many surveys, there were the risks that survey respondents did not understand the questions as anticipated, that the survey questions were presented in such a way that “inaccurate or uninterpretable
answers” were given to survey items, and that the non-respondents differed significantly from the respondents (Dillman, 2007, p. 11).

Summary

To summarize, this chapter provided an overview of the study, including the conceptual framework, literature review, purpose of the study, research questions, research design, definitions, and limitations. Through data collection and analysis, this research examined the relationships among work life perceptions, identity, demographic and profile characteristics, work engagement, and job satisfaction. As noted in the next chapter, the study built on existing literature on both higher education job satisfaction and work engagement. In addition, it was based in identity and job satisfaction theories. Exploring the relationship between engagement and satisfaction extended the literature and theory into a relatively new area of research.
Staff members in higher education are being asked to do more with less. Increases in their responsibilities due to internal and external changes coupled with tight budgets are changing the working environment for this group of employees (Johnsrud, 2002; Scott, 1978). Thus, institutions are looking for ways to enhance the working conditions of these employees while maintaining high levels of productivity. A study using a relatively new construct, employee engagement, coupled with a long-standing construct, job satisfaction, may provide information about creating a positive environment for employees while achieving the goals of the institution (Schaufeli & Salanova, 2007).

This literature review seeks to provide information on the factors that may contribute to employee engagement and job satisfaction. The objective is to identify the factors that research has shown to influence the work lives of these employees. The first section of the literature review will examine studies on the job satisfaction of higher education staff members. The second section of the literature review will focus on employee engagement research.

Before discussing the findings within each section, it is important to specify the scope of the literature review. The first section, higher education work life research, incorporates relevant work life literature even though some of the populations included in the research were broader or narrower than the population studied in this project. For example, although this research study is focused on non-academic employees, some of the studies incorporated in this literature review included both staff members and senior
administrators who likely have academic rank (e.g., provosts and deans) in their sample. Likewise, other studies focused on only midlevel administrators. Finally, some studies included a range of staff levels. Despite these mixed populations, they are included in this literature review because they provide more information on the issues affecting the work lives of staff members within higher education. Notably, this literature review will not incorporate data from faculty work life studies. This information will be excluded because of the vastly different roles faculty and staff members have on campus, the tensions that sometimes exist between those two groups of employees, and their varying responsibilities (Scott, 1978).

While a range of populations are included in this literature review, there is a noticeable lack of research on some staff classifications. Indeed, very little research has been conducted on the work life concerns of clerical and secretarial staff, skilled crafts workers, and service/maintenance workers. Thus, this literature review assumes that the issues of more commonly researched staff populations (e.g., midlevel staff members) apply to some degree to other staff classifications as well.

In addition to including various administrative populations in this literature review, the review includes articles related to two constructs: job satisfaction and morale. Although some researchers (c.f., Rosser, 2004) have found clear distinctions between the two terms (with job satisfaction related to the job itself and morale related to organizational issues), other researchers have used the terms interchangeably. This literature review will address research findings on both satisfaction and morale and will use the term “job satisfaction” to incorporate both satisfaction and morale literature.
Concerning the engagement literature, the literature review is limited primarily to scholarly articles. Although there are many books, articles, and Web sites concerning employee engagement available from professional sources, these sources are focused more on case studies and intervention techniques rather than scholarly research. Given that this study must be based on robust theoretical and methodological research, limited information from professional sources was included in this literature review.

The literature review on research related to higher education staff members’ work lives as well as engagement is provided below. Each section of the review provides a discussion of the work life and identity issues as well as the demographic and profile characteristics that influence the job satisfaction and work engagement of employees.

Higher Education Staff Members’ Job Satisfaction

A number of studies have been conducted to understand more fully the issues that affect the job satisfaction of higher education staff members. Through these studies, researchers have identified work life and identity issues as well as demographic and profile characteristics that influence staff members’ job satisfaction. These factors are discussed below.

Work Life Issues

The primary focus of research on job satisfaction is on the effect of various aspects of work life on job satisfaction. For higher education staff members, there are several work life issues that emerge in the literature, including responsibility without authority, lack of recognition, limited advancement opportunities, limited training and development, and a professional association orientation. Each of these issues will be discussed below.
Responsibility without Authority

Staff members perform many functions within the institution and are important to the overall operations of the university. Yet, despite their considerable responsibility, they have little authority (Johnsrud, 1996; Rosser, 2000, 2004; Scott, 1978). They are the “firing-line managers” who monitor and regulate policies but lack the authority to change, adjust, or develop the regulations they enforce (Rosser, 2000, p. 8). While their supervisors depend on them for the information needed to make policies, staff members do not make the policy itself (Johnsrud, 1996). Yet, paradoxically, they are also held responsible if the policy cannot be enforced or implemented due to issues with the policy itself (Johnsrud, 1996). Understandably, this aspect of their work is frustrating to them given their considerable expertise in their functional area.

Lack of Recognition

Related to their frustration about their lack of authority, staff members are frustrated by the lack of recognition for their efforts. They “want to be recognized and respected for their contribution and expertise within the institution and their work units” (Rosser, 2004, p. 330). The lack of recognition for the role takes its toll on staff members, a fact that is apparent in the job satisfaction studies. Several studies have found a relationship between recognition and job satisfaction in that if staff members perceived low levels of recognition, they were less satisfied with their jobs (Johnsrud, 1996; Johnsrud & Rosser, 1999; Johnsrud et al., 2000; Scott, 1978). Interestingly, it is not only the direct supervisors who are failing to recognize staff members; it is also faculty members (Johnsrud, 1996; Johnsrud et al., 2000). “Faculty are more likely to criticize the increased numbers of administrators than to give credit to those who spend much of their
time directly interacting with students and external constituents” (Johnsrud et al., 2000, p. 39).

Advancement Opportunities

Another work life issue for staff members is the lack of advancement opportunities (Johnsrud & Rosser, 1999; Rosser, 2000; Scott, 1978). Indeed, the literature reports that when salaries are not increased, promotions become even more important to employees (Johnsrud, 2004). Yet, for higher education staff members, promotion presents a challenge. Given the hierarchical nature of their units, there simply are not enough positions for all of the staff members who would like to be promoted (Johnsrud et al., 2000). Furthermore, institutions often conduct outside searches for their upper-level management positions thereby further limiting advancement opportunities for staff members at some organizational levels (Johnsrud et al., 2000). Thus, staff members seeking advancement have three options: take on additional responsibilities, change divisions, or leave the institution (Johnsrud et al., 2000; Scott, 1978). Yet, barriers among functional areas (e.g., student affairs and academic affairs) and institutional types (e.g., liberal arts colleges and community colleges) make such switches difficult (Johnsrud et al., 2000). Given the challenges that must be overcome in order to be promoted, it is understandable that advancement opportunities are an issue for staff members.

Training and Development

“When mobility is limited or difficult, it becomes all the more important to enhance professional growth within the institution” (Johnsrud et al., 2000, p. 40). Not surprisingly, then, staff members are “interested in improving their ability to do the job they have as well as gaining the skills and experience necessary to take on new and more
challenging positions” (Rosser, 2000, p. 9). They are eager to learn and want to keep up with the changes in their field (Scott, 1978). Yet, higher education institutions focus less on employee training and development than do their corporate counterparts, an ironic finding given the overall educational mission of higher education (Scott, 1978). When training and development opportunities do exist on campus, staff members often lack the time, money, and supervisor support to attend the programs (Scott, 1978).

*Professional Association Orientation*

So where do staff members turn for training and development? Some employees turn to their professional associations (Scott, 1978). It is through professional associations that some staff members can learn the latest news in their field, be recognized for their accomplishments (which, as noted above, does not happen frequently on campus), and network with peers performing the same function at different institutions (Scott, 1978). In addition to forming a professional network, peers at other institutions serve as role models and guide other staff members in their career development (Scott, 1978). Overall, professional associations provide and enhance information, status, and recognition to staff members (Scott, 1978). While performing these functions, the professional associations also socialize the staff members into their professional field, which results in a greater commitment to their jobs and careers (Scott, 1978).

While one understands the important reasons why staff members go off-campus for support and recognition, the effects of that necessity are not yet fully understood. Scott (1978) argues that as staff members increase and affirm their specialized knowledge, it makes it more difficult for them to cooperate and coordinate with other campus groups because, in a sense, their focus on their profession forces them onto
functional islands. Staff members’ limited functional scope presents another challenge according to Scott (1978), in that it is easier to share information with peers on other campuses than with colleagues on one’s home campus due to the specialized knowledge and concerns.

While the effects of going off-campus for professional support and recognition are not yet fully understood, it is clear that “professional activities and career development continue to be perennial issues affecting” job satisfaction (Rosser & Javinar, 2003, p. 823). Indeed, studies have shown a positive relationship between career support and job satisfaction (Johnsrud et al., 2000; Rosser, 2004). Though, given the unknowns with this issue, it is important to continue to explore it in future studies.

*Identity Issues*

Identity issues such as work-role fit, job-ability fit, and social support are not directly addressed in the higher education job satisfaction literature. However, several work life issues have emerged that are related to identity issues. The identity issues in the literature include teamwork and conflict, connecting people and groups, and relationships with external constituents. All of these issues are related to the social support of staff members.

*Teamwork versus Interpersonal Conflict*

Relationships are important to higher education staff members. Scott (1978) notes that employees in both education and industry have a need for friendship and a sense of belonging within their workplace. This same finding is highlighted in more recent staff member job satisfaction studies. Indeed, one way to measure relationships is to ask staff members about levels of teamwork and interpersonal conflict in their work environment,
issues that are proving to be opposite of one another in job satisfaction studies of staff members (Volkwein & LaNasa, 1999; Volkwein & Parmley, 2000). Studies have shown that teamwork is positively associated with job satisfaction whereas conflict is negatively associated with job satisfaction (Volkwein & LaNasa, 1999; Volkwein et al., 1998; Volkwein & Parmley, 2000).

Similar to conflict, perceptions of discrimination are also negatively related to job satisfaction (Johnsrud & Rosser, 1999; Rosser, 2004). The research indicates that “the perception of any discrimination has a negative impact on [job satisfaction], including age discrimination, gender discrimination, and race/ethnic discrimination” (Johnsrud & Rosser, 1999, p. 136). The findings on teamwork, conflict, and discrimination support Austin’s (1985) early research, which indicated that job satisfaction is linked to environments that are more caring and more cooperative. Caring and supportive environments indicate a higher level of social support which, in turn, is theorized to increase one’s identification with one’s work role and work engagement.

*Connecting People and Groups*

Higher education staff members connect organizational units and fellow employees to each other. Indeed, Johnsrud (1996) remarked that staff members serve as bridges, linking “vertically between layers of the organization and horizontally between units” (p. 23). In other words, they connect their unit with other units on campus. Furthermore, they are the connection between their supervisors and their constituents (e.g., faculty, staff, external suppliers) (Austin, 1985; Johnsrud & Rosser, 1999; Rosser, 2000, 2004; Scott, 1978). Thus, linking people together is one of the significant roles of staff members (Rosser, 2000). Linking people and groups means forming relationships
and creating, in a sense, the social structure of the organization. By creating these relationships, staff members are building the framework in which social support occurs.

*Relationships with External Constituents*

In addition to being linking pins within the institution, staff members are the institution’s day-to-day liaison with groups external to the school, including the community, businesses, and government (Scott, 1978). Indeed, staff members are often the public’s first point of contact with the institution, and thus they are “critical to the ‘good will’ that institutions want to convey to their constituents” (Rosser, 2004, p. 331). The significance of this responsibility comes through in the job satisfaction literature. Studies have shown that positive external relations are related to the job satisfaction of staff members (Johnsrud & Rosser, 1999; Rosser, 2004). From a social support perspective, this role is similar to the role within the institution. By linking external groups, staff members are once again forming the web of social relationships from which they can give and receive social support.

*Issues Related to Demographic and Profile Characteristics*

Research on staff members has found that both individual and institutional characteristics are related to job satisfaction. These characteristics will be discussed below. The discussion will begin with individual characteristics and then address institutional characteristics that influence job satisfaction.

*Individual Characteristics*

Studies on staff members’ job satisfaction have found that the following characteristics influence job satisfaction: age and years of service; rank and salary; gender, race, and minority status; and administrative unit.
Age and years of service. Staff members’ age seems to have little impact on overall job satisfaction but does impact other work-related measures, according to the studies that included this demographic characteristic. In terms of overall job satisfaction, age either has no relationship or a negative relationship to job satisfaction, according to Volkwein and Parmley’s (2000) and Volkwein and Zhou’s (2003) studies based on data from a national survey of almost 1,440 staff members at 122 public and private doctoral universities. Yet, age was positively related with a positive work climate, satisfactory relations with others, and teamwork – issues that seem to contribute to job satisfaction overall according to Volkwein and Parmley (2000) as well as Volkwein and LaNasa (1999), who used the same national survey data set of 1,440 staff members. Thus, age is important to staff members’ perceptions of their work environment, yet not important enough to affect their overall job satisfaction.

Related to age is years of service. This profile characteristic has also been included in studies of staff member job satisfaction with mixed results. Rosser and Javinar (2003), in their study based on a national survey of 1,166 student affairs staff members, found no relationship between job satisfaction and the number of years a staff member was working in a position or at the institution. Yet they found a negative relationship between morale and the number of years worked at the institution. However, Volkwein and Zhou’s (2003) study found a positive relationship between length of service and job satisfaction. Thus, there is conflicting data about whether the length of service is related to job satisfaction.

Rank and salary. Research results are inconclusive as to the relationship between administrative level or academic rank and job satisfaction. Volkwein and Zhou (2003)
found a positive relationship between administrative level and satisfaction, while Volkwein and LaNasa (1999) and Volkwein and Parmley (2000) found no or a negative relationship. Similarly, with academic rank, Volkwein and Parmley (2000) found a positive relationship but Volkwein and LaNasa (1999) and Volkwein and Zhou (2003) found no relationship. Thus, it is unclear whether administrative level and academic rank have any influence on job satisfaction.

On the issue of pay and its relationship to job satisfaction, the literature once again is inconclusive. Studies are finding positive, negative, and no relationship between salary and job satisfaction (Austin, 1985; Johnsrud & Rosser, 1999; Rosser & Javinar, 2003). While the positive relationship is easy to understand, the nonexistent or negative relationships require more discussion. The surprising lack of relationship between salary and job satisfaction is attributed to the motivators of staff members. Staff members may seek jobs that offer autonomy and variety in environments that are caring and cooperative, according to Austin’s (1985) survey of 260 administrators at a large research university.

The negative relationship between salary and job satisfaction (i.e., higher pay equaled lower satisfaction) was attributed to the fact that more highly paid staff members are more financially invested in the institution and thus are less willing to leave even if they have lower satisfaction. These results were found both in Rosser’s (2004) national survey of almost 2000 administrators and Rosser and Javinar’s (2003) national survey of student affairs administrators.

*Race, gender, and minority status.* Surprisingly, few studies of staff members asked participants to provide their race/ethnicity. Those studies that have included
race/ethnicity have found that it is not related to job satisfaction, such as Johnsrud and Rosser’s (1999) survey of over 800 administrators in a 10-campus university system and Rosser and Javinar’s (2003) study of over 1,100 student affairs administrators.

Concerning gender, the literature indicates mixed results on the relationship between gender and job satisfaction with some studies reporting that women are more satisfied than men and others reporting that women are less satisfied or that there is no relationship (Austin, 1985; Johnsrud et al., 2000; Johnsrud & Rosser, 1999; Rosser & Javinar, 2003; Volkwein & LaNasa, 1999; Volkwein & Parmley, 2000; Volkwein & Zhou, 2003).

Other studies have looked beyond the simple demographic characteristics of race/ethnicity and gender when they asked staff members to report whether they were a minority by race/ethnicity or a minority by gender in their work unit (Rosser, 2004; Rosser & Javinar, 2003). Findings suggest that being a minority in their work unit is not related to job satisfaction (Rosser, 2004; Rosser & Javinar, 2003).

Administrative unit. Research shows that staff members’ functional unit is related to his/her job satisfaction. There is a positive relationship between holding a position in academic affairs and job satisfaction (Volkwein & LaNasa, 1999; Volkwein & Parmley, 2000; Volkwein & Zhou, 2003). Volkwein and Zhou (2003) also found a positive relationship between working in student services and an employee’s job satisfaction. A negative relationship between business affairs and job satisfaction was found by Volkwein and Zhou (2003).

The relationship between job satisfaction and job function is not surprising. In 1978, Scott found that those employees working more closely with the academic mission
of the institution were more satisfied in their jobs. Thus, it is understandable that those working in academic affairs and student support services have higher job satisfaction.

**Institutional Characteristics**

In addition to individual-level characteristics, research has been conducted to determine which institution-level characteristics influence job satisfaction. The findings from these studies indicate that campus characteristics have a very limited relationship to job satisfaction. The only institutional characteristic that was related to job satisfaction was institutional type. Findings indicate that working in a community college was associated with a higher level of morale based on Johnsrud et al.’s (2000) study of 869 administrators in a 10-campus university system. Yet, the authors of that study acknowledge that it was a one-system study of limited scope. While institutional type is associated with job satisfaction, other characteristics are not, including union versus non-union and public versus private environments (Vander Putten, McLendon, & Peterson, 1997; Volkwein, Malik, & Napier-Prancl, 1998; Volkwein & Parmley, 2000).

**Employee Engagement**

Work engagement has become a popular term in organizational management (Bakker & Schaufeli, 2008; Macey & Schneider, 2008; Saks, 2006). Indeed, as Saks (2006) noted, “in recent years, there has been a great deal of interest in employee engagement” (p. 600). For example, the organizational advantages to employee engagement are promoted by popular management books *12: The Elements of Great Managing* (Wagner & Harter, 2006) and *The Carrot Principle: How the Best Managers Use Recognition to Engage their People, Retain Talent, and Accelerate Performance* (Gostick & Elton, 2007). Despite its popularity as a management technique, “much of
what has been written about employee engagement comes from the practitioner literature and consulting firms” (Saks, 2006, p. 600). As a result, there is “a large discrepancy between [employer] interest in employee engagement and academic research and writing” (Bakker & Schaufeli, 2008, p. 151).

However, two primary lines of academic research are developing within the employee engagement arena. Unfortunately, neither line of research has been used within a higher education environment. The first line of research stems from work by Kahn (1990), who determined the antecedents of engagement through qualitative interview studies of 32 employees working in two different organizations. Kahn’s research determined that engagement can be defined as an employee’s physical, emotional, and intellectual attachment to his/her work. He also argued that an employee’s level of engagement is mediated by three psychological concepts: meaningfulness (i.e., task characteristics, role characteristics, work interactions), safety (i.e., interpersonal relationships, group dynamics, management style, organizational norms), and availability (i.e., an employee’s physical and emotional availability, level of self-consciousness, and involvement in outside activities). Kahn’s work was later used as the framework for studies by May et al. (2004) and Saks (2006), two studies that operationalized Kahn’s (1990) qualitative findings into quantitative surveys which helped to formulate this study.

The second line of research stems from work by Schaufeli and his colleagues (c.f., Schaufeli & Salanova, 2007) who initially explored engagement as the opposite of employee burnout. Their interest in engagement as opposed to burnout was related in part to advancements made in the field of positive psychology where researchers focus on developing positive characteristics rather than offsetting negative characteristics.
(Schaufeli & Salanova, 2007). Through this research, it was determined that engagement is not the opposite of burnout but rather has its own characteristics, labeled as vigor, dedication, and absorption (Schaufeli & Salanova, 2007). These three characteristics are similar to the physical, emotional, and intellectual components used by Kahn (1990) to describe engagement (Schaufeli & Salanova, 2007). Thus, even though the two primary lines of engagement research developed separately, both lines are using very similar definitions of engagement.

Notably, another line of engagement research has come from the Gallup Organization (Harter et al., 2002). The Gallup Organization has developed a series of 12 questions designed to measure employee engagement. Called the “Q12,” these questions ask about work life perceptions and the overall score with the Q12 is said to reflect the overall level of engagement in an employee. Like the work of other consulting organizations, Gallup’s Q12 is supported in the practitioner literature but has limited visibility in the academic literature. Harter et al. (2002) was the only study found to include the Gallup instrument in the research. Yet, the challenge with their study is that it not only lacks a strong theoretical foundation but also defines engagement as a “broader concept” which Schaufeli and Salanova (2007) describe as “cognitive vigilance and emotional connectedness” rather than the more complete concept advocated by Kahn (1990) and Schaufeli and his colleagues (p. 143). Nevertheless, this study is included in this literature review whereas the other practitioner-focused articles on engagement, which are found primarily in trade journals, are not included.

Despite the varying definitions of engagement used within the different lines of research, there is agreement between the two primary schools (i.e., Kahn, 1990; and
Schaufeli & Salanova, 2007) that engagement encompasses an employee’s physical, emotional, and intellectual involvement in work. For the purposes of this study, engagement will be defined as “positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption” (Schaufeli et al., 2002, p. 74).

While the definitions of engagement vary according to different lines of research, the antecedents of engagement are remarkably similar across studies. Similar to the literature on higher education employees, the engagement literature has identified work life and identity issues as well as demographic and profile characteristics that influence an employee’s level of engagement. Each of these factors will be discussed below.

**Work Life Issues**

A number of work life issues have been considered in engagement research. Although the different studies frequently use different terminology, similar constructs emerge across the literature. A key difference in the studies is that the research conducted by Schaufeli and his colleagues along with Saks (2006) typically measures a direct relationship between work life constructs and engagement. But research by Kahn (1990) and May et al. (2004) consider both direct and indirect (mediated by meaningfulness, safety and availability) relationships. Given that the Kahn’s (1990) and May et al.’s (2004) findings indicate a relationship between the mediating variables and engagement, both relationships will be discussed as if they are direct relationships. Below is a discussion of primary constructs found in the literature.

**Autonomy and Control**

One of the work life issues often examined in engagement research is employee autonomy and control. Within this broad area, research issues have included autonomy...
(May et al., 2004; Saks, 2006), influence (Kahn, 1990), opinions (Harter et al., 2002), and job control (Bakker et al., 2007, Llorens et al., 2006). As Kahn (1990) described the importance of this work life issue when discussing the importance of having influence in one’s job, “roles that allowed people to have a sense of shaping the external world … offered a sense of meaningfulness” and that “the underlying dimension was power and what it bought: influence, a sense of being valued, valuable, and needed” (p. 706). Thus, it is not surprising that there is a positive relationship between control and engagement.

*Job Characteristics*

Job characteristics have been found to be positively related to work engagement. When employees perceive that their jobs offer variety, challenge, and creativity and they receive feedback on their performance, employees are more likely to be engaged in their work (Harter et al., 2002; Kahn, 1990; Llorens et al., 2006; May et al., 2004; Saks, 2006). The reason for the positive relationship between job characteristics and engagement may be because “jobs that are high on the core job characteristics provide individuals with the room and incentive to bring more of themselves into their work or to be more engaged” (Saks, 2006, p. 604).

*Organizational Norms*

In addition to the job-specific work life issues listed above, engagement research has also highlighted the importance of organizational factors. Kahn (1990) emphasizes the importance of a shared system of expectations or norms within the organization. Employees who share in those norms are more likely to be engaged in their work. Furthermore, Harter et al. (2002) include a question in their surveys that assesses whether employees feel their job is important based on the mission and purpose of the
organization. Finally, Bakker et al. (2007) found that a positive organizational climate is associated with higher levels of engagement. Thus, there are organizational as well as individual components of an employee’s work life that contributes to work engagement.

**Professional Development**

In contrast to the literature on higher education staff members, career and professional development issues are not often included in engagement studies. The exception is the Gallup Q12 questionnaire which includes three questions related to professional development (Harter et al., 2002). It is unclear as to why engagement literature has not focused on professional life issues in studies on the antecedents of engagement.

**Identity Issues**

Identity issues are addressed in the engagement literature, which is based on psychology and social psychology, more so than in the higher education job satisfaction literature. Issues such as work-role fit and social support are directly addressed in engagement studies. The identity issues in the literature include work-role fit and positive interpersonal relationships. Both of these issues are related to the importance of social support to staff members.

**Work-Role Fit**

An employee’s fit with a job is also important to engagement. Whereas Harter et al. (2002) incorporate work-role fit into their study through a question about doing what one does best at work, Kahn (1990) and May et al. (2004) emphasize the identity aspects of work-role fit. Indeed, Kahn (1990) noted that “roles carried identities that organization members were implicitly required to assume” and employees assumed these roles to
varying degrees based upon “how well the roles fit how they saw or wanted to see their
selves” (p. 706). Likewise, May et al. (2004) assessed “individuals’ perceived fit with
their jobs and self-concept” (p. 21). Their analysis indicated that work-role fit was
important to engagement in that meaningfulness related to engagement (May et al.,
2004).

Positive Interpersonal Relationships

Relationships are also frequently studied in engagement research. Studies show
that positive relationships with supervisors, colleagues or clients relate to higher levels of
engagement (Bakker et al., 2007; Harter et al., 2002; Kahn, 1990; Llorens et al., 2006;
May et al., 2004). Kahn (1990) emphasizes that positive relationships result in
“supportive and trusting” interactions that “promoted dignity, self-appreciation, and sense
of worthwhileness” and “are an invaluable source of meaning in people’s lives” (pp. 707-
708).

Issues Related to Demographic and Profile Characteristics

Research on employee engagement has found that very few demographic
characteristics are related to engagement. Indeed, in their meta-analysis of engagement
data from surveys conducted in 10 countries with 14,500 respondents, Schaufeli et al.
(2006) found that “engagement was weakly positively related with age” (p. 710). Yet, the
authors state that the correlation was so weak (ranging from .00 to .28) that “although in
many cases statistically significant, these correlations generally lacked practical
significance” (Schaufeli et al., 2006, p. 711).

Likewise, the authors found that there were gender differences in engagement
levels. While the differences were statistically significant they were contradictory on
whether men or women were more engaged with results varying by country. For example, in Canada, no gender differences were observed, while in Germany men were more engaged which contrasted with the Netherlands where women were more engaged (Schaufeli et al., 2006). Thus, research shows that level of engagement may vary according to nationality and gender, but the research is inconclusive.

While research on engagement levels by age and gender is inconclusive, studies have found that engagement does vary by occupational group. Indeed, Schaufeli et al. (2006) found that managers and educators, for example, are more engaged than blue-collar workers. Schaufeli and Salanova (2007) argue that this may be a result of engagement being related to “proactivity, initiative, and commitment,” which are traits demonstrated by professional groups (p. 149).

Theoretical Framework

This study rests on two theoretical frameworks. The first is that work engagement is related to one’s identification with one’s work role. In turn, one’s identification with one’s work role is related to one’s embracement of the role, which depends upon one’s fit with the role, attachment to the role, and social support received in the role. Thus, engagement depends upon ability fit, role fit, and social support. The second theoretical position is that job satisfaction is a result of satisfaction with the facets of one’s job which, in turn, is the result of the fit between what one expects and how well those expectations are perceived to have been met. Thus, job satisfaction is a result of perceptions about work life issues. Both theories are discussed below.
Work Engagement

The engagement framework of this study is based in identity theory, role embracement theory, and social support theories. These theories reflect theories in sociology and social psychology. The overall argument is that identifying with one’s work leads to engagement (and possibly job satisfaction). The level of identification depends upon the degree of role embracement and social support. These lines of sociological research are discussed below.

Identity

Early views on identity reflected a fundamental belief that a person’s identity was stable over time and was his/her “true” self (Scott & Marshall, 2005). However, identity theory challenges the traditional view of identity. Rather than seeing identity as a person’s core self, identity theorists see identity as a reflection of one’s social relationships (Howard, 2000). Indeed, identity theorists contend “that one’s sense of self is largely grounded in the perceptions of others” and that “through social interaction and the internalization of collective values, meanings, and standards, one comes to see oneself through the eyes of others and constructs a more or less stable sense of self” (Ashforth, 2001, p. 26).

Because identity is based in social relationships and people have many relationships, “one may have a long list of identities, limited only by the number of structured role relationships one is involved in … which taken together comprise the self” (Stryker, 1980, p. 60). Thus, it is through roles and relationships that individuals form their identities so that the “socially constructed sense of self is firmly anchored to the discrete roles that one plays in society” (Ashforth, 2001, p. 26).
Roles, then, are fundamental to one’s identity. They provide people with a way of “expressing themselves and gaining support and acceptance” (Ashforth, 2001, p. 27). Furthermore, role identities provide a sense of meaning, a basic psychological need (Ashforth, 2001). However, individuals do not always accept the role identities assigned to them through their relationships. Indeed, a person may distance himself/herself from an identity. As Goffman (1961) notes, when considering one’s identity, some parts “he will feel are rightfully his, others he will not; some he will be pleased and able to accept as part of his self-definition, others he will not” (p. 103).

The degree to which an individual accepts or identifies with a work role affects both the employee and the organization. Employees who identify highly with their jobs have a greater sense of meaning in their work, which relates to “a sense of purpose and significance associated with a role beyond the role’s obvious formal duties and requirements” (Ashforth, 2001, p. 64). For organizations, a high level of role identification “matters because the individual can then be trusted to faithfully enact the role identity,” which results in “compliance with role requirements, good performance, organizational citizenship or prosocial behaviors, job satisfaction and organizational commitment, sense-making and decision making that is consistent with organizational values and beliefs, group advocacy, and lower intentions to quit” (Ashforth, 2001, p. 82). Thus, an employee’s “perceptions of oneness with a role … helps ensure that one thinks, feels, and acts like an exemplary member of the role” so that “doing well for the role … is tantamount to doing well for oneself” (Ashforth, 2001, p. 83).
Role Embracement

Given the importance of role identities for individuals and organizations, it is helpful to better understand the factors that lead to greater levels of role embracement. Role embracement is the degree to which a person accepts a role, and it is contrasted with “role distance” (Goffman, 1961, p. 1080). “To embrace a role is to disappear completely into the virtual self available in the situation, to be fully seen in terms of the image, and to confirm expressively one’s acceptance of it” (Goffman, 1961, p. 107). Thus, one becomes the role (Goffman, 1961).

Notably, there is a striking similarity in the descriptions of employees who fully embrace their roles and those who are fully engaged in their work. Engaged workers demonstrate a “positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption” (Schaufeli et al., 2002, p. 74). Likewise, they “employ and express themselves physically, cognitively, and emotionally during role performances” (Kahn, 1990, p. 694). These descriptions of engagement correspond with Goffman’s (1961) description of embracement.

Goffman (1961) listed three issues that are related to role embracement: (a) “admitted or expressed attachment to the role,” (b) “a demonstration of the qualifications and capacities for performing it,” and (c) “spontaneous involvement in the role activity at hand, that is, a visible investment of attention and muscular effort” (p. 106). Concerning spontaneous involvement (which he terms “engagement”), he argued that it is “a psychobiological process that a cat or a dog can display more beautifully than man” (p. 110). Thus, he seems to say that spontaneous involvement is not as central of an issue to humans embracing their roles as are issues of attachment and ability-fit. Examples of role
embracement can be seen in some occupations, such as a traffic officer vigorously waving his/her arms at an intersection during rush hour (Goffman, 1961; Kahn, 1990).

**Social Support**

Whereas Goffman argued that one’s role embracement is primarily related to attachment and ability-role fit, other theorists argue that role embracement is attributed to socially supportive relationships. Social relationships help to both create identity and, at the same time, are created by identity. For example, Howard (2000) notes that role identities are dependent upon “their salience to the self and the degree to which we are committed to them, which in turn depends on the extent to which these identities are premised on our ties to particular other people” (Howard, 2000, p. 371). Thus, social ties help to dictate the degree to which one embraces a role. Likewise, people embrace roles in order to create social ties. Ashforth (2001) notes that “individuals enact their salient role identities as a means of expressing themselves and gaining support and acceptance from members of their role set” (p. 27, emphasis added). Because identity is created through and for social relationships, it is not surprising that in a work setting “the actions of an individual’s managers and peers tend to have an enormous impact on the experiences of the individual and the meaning he or she derives from them” (Ashforth, 2001, p. 156).

Supportive relationships not only provide identity and meaning, but they also convey information about role performance. Indeed, supportive relationships “convey identity and normative expectations” (Podolny & Baron, 1997, p. 677). In a work-setting, these “identity” networks help to set “normative expectations for how [an individual] should allocate time and what goals [the individual] should pursue” (Podolny & Baron,
Thus, supportive relationships help to clarify performance expectations and objectives.

*Job Satisfaction*

Whereas research on higher education staff members has included identity issues, as noted in the literature review, the theoretical focus of that research has not been on identity per se. Rather, the research is often based on the issues or factors that explain job satisfaction. Thus, the conceptual framework for the job satisfaction component of this study rests in that approach.

Specifically, this study is based on the work of Lawler (1994). Lawler’s (1994) theory focused less on defining job satisfaction in and of itself but rather focused on understanding the work life issues that contribute to job satisfaction. Thus, his work is centered on an employee’s response to facets of a job as well as his/her overall reaction to the job. His focus on the facets of the job in addition to the overall job is an important distinction for this study, which will also assess facet satisfaction as well as overall job satisfaction. The difference between the two is that “facet satisfaction refers to people’s affective reactions to particular aspects of their job … [whereas] job satisfaction refers to a person’s affective reactions to [his/her] total work role” (Lawler, 1994, p. 82).

By studying facets that contribute to job satisfaction, Lawler (1994) expands the focus from the overall level of job satisfaction of a group of employees to the “conditions that lead to people experiencing feelings of satisfaction or dissatisfaction” (p. 100). Focusing on the factors that contribute to job satisfaction enables researchers to overcome some of the flaws in job satisfaction research, one of which is trying to assess the percentage of dissatisfied workers in the workforce without understanding the factors that
contribute to that employee perception (Lawler, 1994). Studies on overall workforce satisfaction or dissatisfaction can produce very different results based on how the satisfaction questions were formulated. Thus, there is “difficulty in obtaining meaningful conclusions from the data” (Lawler, 1994, p. 101).

Lawler’s (1994) facet-based theory is a “discrepancy model,” in which he argues that satisfaction with facets as well as the job overall is a result of the employee comparing the inputs put into the job with the amount received out of the job. When an employee receives what he/she feels he/she should have received, the employee is satisfied. In essence, then, Lawler’s (1994) theory is fundamentally focused on the fit between expectations and outcomes.

While Lawler’s theory does not emphasize the employee’s level of identification with the job through role fit, there are still overlaps between the identity framework and the job satisfaction framework used in this study. For example, Lawler (1994) emphasized that job satisfaction studies have identified interpersonal relationships as an important determinant of job satisfaction. Likewise, engagement studies have found that job characteristics or facets are related to engagement. Thus, it seems that these two lines of literature and theoretical perspectives are coming to some of the same conclusions, using two separate theoretical frameworks.

**Implications for Research**

Social support, role embracement, and identity are linked to one another and to work engagement. Furthermore, an employee’s satisfaction with job facets contributes to his/her overall job satisfaction. Clearly, these theories have implications for this study. In essence, the argument is that in order to understand an employee’s level of work
engagement and job satisfaction, one must understand the employee’s work life perceptions, role embracement (i.e., work-role attachment and ability-role fit), and social support. Therefore, this study will include survey questions related to employees’ perceptions of their work (i.e., work life perceptions), their attachment to their role (i.e., work-role fit), their job-ability fit (i.e., job-ability fit), and level of social support (i.e., social support). Along with these issues and based on the literature, the study will also explore employees’ demographic and profile characteristics. Overall, the objective is to explore how the issues of identity (social support, work-role fit, and job-ability fit) and work life perceptions relate to work engagement and job satisfaction.

Significance of the Study

This study is significant from both theoretical and practical perspectives. From a theoretical perspective, work engagement has not yet been studied within higher education. Thus, this study is introducing a new construct into research on higher education employees by adapting and modifying an instrument previously used in the field (c.f., Rosser, 2004) with an emerging concept (i.e., work engagement). Furthermore, the study is considering the antecedents of engagement from a sociological versus psychological vantage point by incorporating identity theory into the analysis. Research to date on engagement (c.f., Kahn, 1990; May et al., 2004) has focused on the psychological dimensions rather than sociological dimensions. While earlier studies have used a sociological approach, that line of research has not continued forward to the same degree as the psychological approach.

In addition to considering employee engagement within higher education, this study is also contributing to the literature on job satisfaction of higher education
employees. While some research has been conducted on administrators and staff members, more work remains to be done. Thus, this study will build on and add to the existing higher education job satisfaction literature.

Finally, this study will explore the differences between work engagement and job satisfaction. If differences do indeed exist, then this study will provide information about the issues that contribute to these two ideas to determine if the same issues contribute to both ideas or if different issues relate to engagement versus job satisfaction.

From a practical perspective, this research study proposes to provide information on the engagement and satisfaction of higher education staff members. Engaged and satisfied employees are “committed to personal and organizational success” (Gostick & Elton, 2007, p. 83). Thus, understanding the factors that contribute to engagement and satisfaction will help both employees and institutions create positive work environments.

Summary

To summarize, this chapter provided a literature review and theoretical framework for this study. In addition, it highlighted the significance of the research project. The key point is that within both the higher education and engagement literature, a number of issues have been found to be related to the job satisfaction or work engagement of employees. Work life and identity issues as well as demographic and profile characteristics have been found to influence employees. Building on these findings, this research study will try to identify the factors that influence higher education staff members’ level of engagement in their work. As described in the next chapter, the instrument used in this study will reflect the literature and theoretical framework outlined in this chapter. The instrument was designed specifically to capture work life, identity,
job satisfaction, and work engagement responses from employees. The responses from employees will then be analyzed to determine the issues that influence job satisfaction and work engagement. The analysis will provide information in order to meet the goal of the study: To identify the factors that are most associated with engagement and job satisfaction so that improvements can be made in the working situations of staff members.
CHAPTER THREE
RESEARCH METHOD

Understanding the factors that are related to employee work engagement and job satisfaction will help both institutions and employees better manage the pressure of increased responsibilities during times of budget cuts and heightened public scrutiny (Johnsrud, 2002; Scott, 1978). The purpose of this study was to examine the relationships among work life perceptions, identity, demographic and profile characteristics, work engagement, and job satisfaction. This chapter discusses the research methods that were used in the study, including the research design, data source, population, data collection procedures, research questions, instrumentation and variables, validity and reliability, data analysis procedures, and protection of human subjects.

Research Design

Using a survey instrument, this quantitative study examined the relationships among demographic and profile characteristics, work life perceptions, identity, work engagement, and job satisfaction. More specifically, this study provided descriptive information as well as Pearson correlation information and multiple regression models to identify the relationships among work life perceptions, identity, work engagement, and job satisfaction.

This study built on the research of Rosser and her colleagues (c.f., Rosser, 2004; Rosser et al., 2007; Rosser & Javinar, 2003), who examined higher education administrators’ work life perceptions, job satisfaction, morale, and intent to leave. However, one of the key differences between the previous research and this study was the
incorporation of a new outcome variable and construct, engagement. While engagement and satisfaction are similar constructs, research indicated that they were unique measurements (Saks, 2006). Furthermore, professional literature proposed that job satisfaction coexisted with work engagement and varied in level within each individual (Gostick & Elton, 2007). Yet, the literature also indicated that the antecedents of engagement were similar to those of job satisfaction (c.f., Schaufeli & Salanova, 2007). Hence, it seemed that engagement and satisfaction were driven by some of the same work life perceptions yet they were viewed as two distinct constructs. Based on the literature, two conceptual models are proposed and depicted in Figure 2.

![Conceptual Models Diagram](image)

**Figure 2: Proposed conceptual models**

This study built upon a modified and adapted version of Rosser’s instrument used to study job satisfaction in higher education by incorporating a new work-related construct, work engagement, which has not yet been addressed in the higher education literature. Rosser’s instrument was adapted and modified based upon a thorough review of the literature and consultations with the institution at which the survey was administered. The end result was an instrument tailored to this study and the institutional
environment, which also incorporated the construct of work engagement and its theoretical underpinnings.

Data Source

Data were gathered through a survey administered to higher education staff members working in a research university. The institution is classified as a four-year, public, doctoral-granting research university with high research activity (Carnegie, n.d.). Located in an urban area in the Midwest, the campus serves approximately 14,000 primarily undergraduate, nonresidential students (Carnegie, n.d.).

Population

Employees asked to participate in this study included the total population of staff members working within different organizational units at one institution. The units included in the study represented student affairs and a professional school. These units (i.e., student affairs and a professional school) could be classified as two of the four types of administrative units found within higher education (Rosser, 2000). There are approximately 275 student affairs employees and approximately 20 professional school staff members, making a total survey population of approximately 300 employees. All administrative staff members working within these units were included in the study.

Access to the employees was gained through the institution’s human resources office, the organization endorsing this study. The human resources office provided the names and e-mail addresses of all employees working in the units included in the study. Participation in the survey was voluntary and responses were confidential. Given that the questions were related to the participants’ employment, it was important that any risks of participation were minimized. Thus, survey communication materials indicated that
responses were treated confidentially, participation was voluntary, and non-participation would not negatively impact their employment. Furthermore, it was noted that responses would be reported to the institution only in aggregate form to protect the identity of survey respondents. It is notable that even though the human resources administrators endorsed the study, they did not have access to the individual responses to the survey to assure confidentiality.

Data Collection Procedures

The survey was designed, distributed, and collected using the process and procedures recommended in Dillman’s (2007) Tailored Design Method. The survey was distributed and responses collected via the Internet using a commercially available survey tool (i.e., SurveyMonkey.com). Using the Internet for survey distribution and data collection was a viable option for this research project because the majority employees of the university had access to e-mail and the Internet. There were 25 employees without an e-mail account at the institution, and those employees received the survey via U.S. mail. In addition, paper-based surveys were made available to any employee upon his/her request. The e-mail message to employees with the link to the online survey included instructions for accessing the paper-based version of the survey.

In addition to designing the survey following Dillman’s (2007) recommendations, the survey was tested on different operating systems, Internet browsers, and screen configurations to ensure survey accessibility and usability. Furthermore, the survey was pilot tested on staff members representing different staff levels and functions. The pilot test was used to not only highlight questions or issues that might arise concerning the
questions and the instrument itself but also to assess the length of time it takes to complete the entire survey. The pilot of the study occurred in September 2007.

The survey was distributed according to Dillman’s (2007) recommendations so that multiple contacts were made with the survey population. Before actual survey communiqués were sent to participants, an e-mail from the university’s human resources staff was sent to all employees included in the study prior to the survey’s distribution. The e-mail indicated that a survey would be sent shortly and asked for participation.

After the introductory e-mail, the first contact from the researcher was made with employees in March 2008. That e-mail included a brief introduction with a link to the survey. Notably, the online survey contained full instructions including information on human subjects’ protections as well as the survey instrument itself. Text of this message is provided in Appendix A.

The next contact from the researcher occurred one week after the survey link was distributed. At that time, an e-mail message was sent to all employees in the survey population to thank those who have already completed the survey and remind those who have not. An additional link to the survey was included in that message. A final e-mail, similar to the first reminder and thank you message, was sent to participants from the researcher two weeks after the survey initially was distributed. This e-mail emphasized that paper surveys are available upon request. Texts of these messages are provided in Appendices 3 and 4. Although Dillman (2007) noted that 76% of the total responses received to an electronic survey will be submitted within four days of receiving the survey, employees were able to submit responses to this survey for over two weeks following the initial survey distribution.
Because the survey was distributed via the Internet and neither names nor computer identifiers were collected, the researcher was not able to identify who completed the survey based on electronic data. The challenge with this approach was that the researcher was not able to target selectively those individuals who did not complete the survey when sending follow up messages, an approach that was recommended by Dillman (2007). While this posed a risk in generating responses, the advantage of this approach was that the respondents did not have their names or computer identifications connected with the survey. Because this was a workforce study and aggregate responses were provided to the employer, clearly emphasizing confidentiality was extremely important.

Research Questions

1. What work life items are most important to staff members?

2. Do work life perceptions of staff members vary by their demographic and profile characteristics?

3. How are the constructs of work engagement and job satisfaction defined and measured?

4. What are the relationships among the domains of work life perceptions, identity, work engagement, and job satisfaction?

5. What are the demographic and profile characteristics, work life perceptions, and identity issues that explain work engagement and job satisfaction (using two regression models)?
Instrumentation and Variables

The survey instrument used in this study was adapted and modified from an instrument used by Rosser and her colleagues in national-level studies of administrators working within higher education (Rosser, 2004; Rosser et al., 2007; Rosser & Javinar, 2003). The adaptations and modifications were based on a thorough review of the literature. Furthermore, the variables and constructs in various higher education staff member job satisfaction and engagement surveys were compared to one another to determine the core set of questions that are asked in this type of research. Finally, input was sought from human resources staff members at the institution endorsing the survey, and modifications were made based upon their feedback. Appendix B provides a copy of the survey instrument. Overall, the survey instrument included a total of 63 statements about work life perceptions, identity, work engagement, and job satisfaction. The theorized constructs and variables are described below.

*Work Life Issues*

Employee perceptions of their work life were assessed through 31 questions grouped into six constructs. The constructs included career support (e.g., access to training, clear performance criteria), inter-institutional networks (e.g., contact with and advice from peers at other institutions), recognition for competence (e.g., recognition, guidance, autonomy), working conditions (e.g., salary, work environment), work unit relationships (e.g., sense of teamwork, good communication), and external relations (e.g., relationships with faculty, staff, students, public). Appendix E provides further detail on the survey items included in each of these constructs.
The variables included in the work life constructs were adapted and modified from Rosser’s (2004) instrument, with the exception of inter-institutional networks, the items of which were added after a review of the literature. Adaptations and modifications to Rosser’s instrument included comparing the instrument to Gallup’s Q12 questions. Gallup’s Q12 were frequently cited in business journals as a method of assessing engagement (Harter et al., 2002). The comparison revealed that Rosser’s instrument incorporated similar questions to the Gallup Q12 and thus only one additional question was added to reflect the Gallup Q12 questions.

In addition, the variables in Rosser’s (2004) instrument were compared to the variables used in other engagement studies. Several variables included in engagement studies were similar to variables in Rosser’s job satisfaction construct. Thus, those variables were included in the instrument used in this study; however, their construct placement reflects Rosser’s use of the variable. Additionally, several variables and constructs used in earlier research by Rosser and her colleagues (c.f., Rosser, 2004) were not included in the instrument due to limitations on the number of items included in this study as well as the scope of this study. Finally, items were modified based upon feedback from the institution’s human resources staff, who endorsed the study.

The work life perceptions statements were provided on a five-point Likert scale to assess the respondents’ level of agreement or disagreement with the statement. The scale with be built so that “1” indicated “strongly disagree” and “5” indicated “strongly agree.”
Identity Issues

The identity construct referred to an employee’s role embracement, which was theorized to be a result of work-role fit, job-ability fit, and social support. Each of these identity constructs was included in this work engagement and job satisfaction study.

Work-Role Fit

An individual’s identification with his/her job was related to his/her level of work engagement (Kahn, 1990; May et al., 2004). Thus, the survey included four questions related to the role fit construct, which were “I like the identity my job gives me,” “My job ‘fits’ how I see myself,” “The work I do on this job helps me satisfy who I am,” and “My job “fits” how I see myself in the future.” The variables used in the survey were previously used in May et al.’s research on work engagement (2004). The factor analysis in May et al.’s (2004) research indicated that each variable in this scale was associated with the overall construct.

Job-Ability Fit

Concerning the job-ability fit construct, these five variables were modified from the items used in early research by Abdel-Halim (1981) to assess the “extent to which the individual’s ability and competence were matched with [his/her] job” (p. 553). The five job fit variables included in the study were “My work utilizes my full abilities,” “I feel competent and fully able to handle my job,” “My job gives me a chance to do the things I feel I do best,” “My job and I are well matched,” and “I feel I have adequate preparation for the job I now hold.” Research studies indicated that the coefficient alphas for this scale ranged from .73 to .80 (Abdel-Halim, 1981; Fields, 2002; Xie, 1996; Xie & Johns, 1995).
Social Support

According to social theory, an individual’s identity is related to the level of social support he/she receives (Howard, 2000). Thus, the survey included six questions designed to assess the level of social support the respondent perceives from his/her supervisor and colleagues. The questions asked whether the supervisor or colleagues help to make the job easier, are easy to talk with, and can be relied on when things get tough. Appendix E provides additional detail on these questions. The variables used in the survey were adapted from an instrument used by Caplan, Cobb, French, Van Harrison, and Pinneau (1980). In research, this construct was examined via multiple sub-scales (e.g., supervisors, supervisor and colleagues, colleagues), with construct validity ranging from .79 to .91 in different research studies (Fields, 2002; Lee & Ashforth, 1993; Lim, 1996; Repetti & Cosmas, 1991).

The identity statements for work-role fit, job-ability fit, and social support were presented on a five-point Likert scale to assess the respondents’ level of agreement or disagreement with the statement. A “1” indicated low agreement whereas a “5” indicated high agreement.

Work Engagement

Work engagement was measured using a modified version of the nine-item instrument developed by Schaufeli et al. (2006). The instrument, called the Utrecht Work Engagement Scale (UWES), assessed the frequency of an employee feeling a high level of vigor, dedication, and absorption in his/her work. The vigor, dedication, and absorption variables corresponded with the physical, emotional, and intellectual dimension identified in other engagement research (Kahn, 1990; May et al., 2004; Saks,
While other engagement surveys have developed their own variables to assess engagement (May et al., 2004; Saks, 2006), the UWES has been used successfully in research in multiple countries, various fields, and a range of occupations. Although research has shown that there were three constructs (i.e., vigor, dedication, absorption or physical, emotional, intellectual aspects) within the overall construct of engagement, research has also shown the three constructs (i.e., vigor, dedication, absorption or physical, emotional, intellectual aspects) were highly correlated in terms of engagement (Schaufeli & Salanova, 2007). Thus, “the total score of UWES can be used just as well” as three separate construct scores (Schaufeli & Salanova, 2007, p. 145).

Notably, the modifications to the nine questions incorporated into this survey included using questions from a 17-item UWES in place of several questions on the nine-item instrument. The questions taken from the 17-item instrument corresponded to the same sub-constructs as the items they were replacing. Thus, the nine questions included in this study still represent the three sub-constructs. Examples of questions in this construct include “When I get up in the morning, I feel like going to work,” “I am proud of the work that I do,” and “Time flies when I am working.” Appendix B provides each of the survey items included in the work engagement construct.

Given its prevalence in engagement research, a modified UWES was used in this survey. This construct was measured by nine items on a seven-point Likert scale indicating the frequency of the respondents feeling toward the statement with responses ranging from “never” to “every day.”
Job Satisfaction

Job satisfaction reflects one’s feelings towards one’s job (Rosser, 2004; Volkwein & Zhou, 2003). It is widely agreed that it is a multi-dimensional construct comprised of variables that increase and decrease satisfaction (Volkwein & Zhou, 2003). Rosser’s (2004) job satisfaction construct was modified and adapted for this study. Eight items were included in the construct, including “There is sufficient variety in my job,” “I enjoy working in my position,” “I have input in deciding matters that affect my work,” “I have a great deal of freedom on the job,” “I have the trust and confidence of my colleagues,” “I am satisfied with the work and responsibilities I have,” “Compared to my peers of similar experience and skills, my salary compensation is fair,” and “I am satisfied with my job on campus.” The items were placed on a seven-point Likert scale with “1” indicating “extremely dissatisfied” and “7” indicating “extremely satisfied.”

Demographic & Profile Characteristics

Questions related to demographic and profile characteristics were included in the survey to determine whether levels of engagement and satisfaction are related to individual characteristics. The higher education job satisfaction literature and the work engagement literature indicate that several demographic and profile characteristics may influence job satisfaction, including gender, race/ethnicity, age, years of service, position/rank, salary, minority status, and administrative unit (Austin, 1985; Johnsrud et al., 2000; Johnsrud & Rosser, 1999; Rosser, 2004; Rosser & Javinar, 2003; Schaufeli & Salanova, 2007; Volkwein & LaNasa, 1999; Volkwein & Parmley, 2000; Volkwein & Zhou, 2003). Thus, these variables were included in this study to determine their relationship to work engagement and job satisfaction. In addition, foreign-born status,
educational degree, previous employment in higher education, and contact time with students were other demographic and profile characteristics included in the study. At total of 17 demographic and profile questions were included at the end of the survey. Appendix B provides each of the items regarding demographic and profile characteristics.

Validity and Reliability

Given that many of the items included on this instrument were adapted from previous research, it is important to review the constructs to determine their validity and reliability. Indeed, “where measurement [of a construct] is derived from a multi-item scale, new sources of measurement error potentially emerge” including validity and reliability (Kent, 2001, p. 208). Validity refers to “whether a measuring instrument … succeeds in measuring what it was designed” to measure (Aldridge & Levine, 2001, p. 183). One way to assess validity is to review the items within a construct for content validity. “Content validity is sometimes known as ‘face’ validity because the measurement is reviewed on the basis of whether or not it seems to be reasonable ‘on the face of it’” (Kent, 2001, p. 209). Content validity depends on the procedures used to develop the survey instrument. For this study, the survey items were adapted from items used in earlier engagement and job satisfaction studies. The adaptations were designed to reflect the literature and the survey population while at the same time to reduce redundancy among items. After developing the survey, it was piloted with higher education staff members to determine if the questions were clear, any issues seemed to be missing, and any items were confusing.

Reliability refers to the internal consistency of the items in the construct or how well the items hold together as a homogeneous concept. In other words, reliability is the
“extent to which the items used to measure a concept ‘hang’ together” (Kent, 2001, p. 209). Notably, there are other assessments of reliability that were not used in this study, including stability over time or scale equivalence testing (Kent, 2001). Concerning internal consistency, in an ideal situation, “all the items used in the scale should reflect some single underlying dimension; statistically that means that they should correlate one with another” (Kent, 2001, p. 209). Using SPSS version 16.0 (2007), a Cronbach’s alpha was calculated to measure the internal consistency of each construct.

Data Analysis

As noted above, this study sought to answer five research questions. Each research question is listed below along with a description of the statistical technique that was used to address that question. However, prior to addressing the research questions, descriptive statistics including appropriate frequencies, percentages or means and standard deviations of individuals’ demographic characteristics were assessed to determine the profile of the survey respondents. After generating descriptive statistics, the data were reviewed for inconsistencies, missing data, and normality. Data analysis then occurred for each of the research questions.

1. **What work life items are most important to staff members?**

Descriptive statistics were presented for each work life and identity item including means and standard deviations for each item. In addition, means and standard deviations were also presented for each work life (e.g., recognition for competence) and identity (e.g., job fit) construct. The descriptive statistics were examined to determine which perceptions (e.g., recognition for competence, hiring practices) were most important to staff members.
2. Do work life perceptions of staff members vary by their demographic and profile characteristics?

T-tests and an analysis of variance (ANOVA) were conducted to determine whether significant differences in work life perceptions existed among groups of survey respondents as distinguished by their demographic and profile characteristics. An independent-samples t-test compares the means of responses of two groups to determine if significant differences exist (SPSS Base 15.0 User’s Guide, 2006). Thus, this technique was used to make comparisons between responses according to the demographic variables of gender, minority by race/ethnicity, minority by gender, U.S. born, job title (categorized into two groups), benefits eligibility, time spent with students, and employment at another institution. One-way ANOVA compares the means of responses of more than two groups to determine if differences exist (SPSS Base 15.0 User’s Guide, 2006). One-way ANOVAs were used to make comparisons among work life perceptions according to the demographic and profile characteristics (with some continuous variables being placed into categories) of race/ethnicity, salary, degree, age, years in job, years on campus, and length of employment at another institution. The results of the t-test and ANOVA procedures indicated whether significant differences existed in work life perceptions by demographic and profile characteristics.

3. How are the constructs of work engagement and job satisfaction defined and measured?

The constructs included in this study were represented by multiple items on the survey. Thus, it was important to determine how exactly the constructs were defined and measured. To address this research question, Cronbach’s alphas were calculated for each
construct to measure the internal consistency of the survey items within each construct. In addition, a Principal Components Analysis with no rotation was completed to determine the factor loadings of individual items within the construct. This method was chosen over an Exploratory Factor Analysis because previous research, from which the survey items were drawn, had indicated which survey items were related to each construct. Finally, Pearson correlation coefficients were calculated to assess the relationship between work engagement and job satisfaction to determine whether the relationship indicated multicollinearity. Multicollinearity occurs when two items are highly correlated and thus may actually measure the same underlying construct. In such cases, the items in the collinearity constructs can be combined to create one larger construct (Stevens, 2002). As a result of these analyses, the variables that comprise each construct were identified thereby defining and measuring the constructs.

4. *What are the relationships among the domains of work life perceptions, identity, work engagement, and job satisfaction?*

To address the fourth research question, the relationship among the constructs was assessed using Pearson correlation coefficients. The correlation coefficients assessed the strength of the linear relationships among the constructs as well as between each construct and work engagement and job satisfaction (SPSS Base 15.0 User’s Guide, 2006). As a result of this analysis, significant relationships among constructs were determined. The correlation coefficients were used to determine the strength of the relationship as well as whether multicollinearity existed among the constructs.
5. What are the demographic and profile characteristics, work life perceptions, and identity issues that explain work engagement and job satisfaction (using two regression models)?

Multiple linear regression analysis was completed to examine which demographic and profile characteristics as well as work life and identity constructs explain the work engagement and job satisfaction of higher education staff members. Two multiple regression models were created, one that included work engagement as the outcome variable and one that included job satisfaction as the outcome variable, which best explained work engagement and job satisfaction in parsimonious models. The results revealed which indicators explained work engagement and job satisfaction.

Protection of Human Subjects

This study followed the guidelines established by the Institutional Review Board (IRB) on the researcher’s campus. In addition, the study was approved by the office of human subjects research at the campus where the study took place. Both offices reviewed all processes and instrumentation used in this research project. Topics addressed with both offices included the possible harm the study would have on participants, the risks of participation, informed consent, and data storage and reporting (Patton, 2002). Concerning risks, there was minimal risk in this study because the surveys were confidential, no names were collected on the surveys, and data and results were reported in the aggregate so that individuals could not be associated with specific responses. Finally, the name of the institution will not be reported in any scholarly publication.

It is notable that participation in this study was voluntary and participants were informed fully of potential risks and benefits so that they could make an informed
decision about participating in the study. Information shared with participants included
data about the use of survey results, (e.g., used for research purposes and to develop
employee training programs; not used for performance evaluation), the types of questions
asked, the collection of responses, and the storage and protection of data.

Summary

This chapter outlined the research methods used in the study. The research design,
data source, population, data collection, research questions, instrumentation, data analysis
procedures, and protection of human subjects were discussed as the key components of
this research project. The study itself sought to explore the work life and identity
perceptions of staff members and to determine the relationships between those
perceptions and perceptions of work engagement and job satisfaction. The next chapter,
Chapter Four, will provide the results to the study’s five research questions.
CHAPTER FOUR

RESULTS

This study examined research questions related to the relationships among demographic and profile characteristics, work life perceptions, identity, work engagement, and job satisfaction using survey data gathered from higher education staff members. The study was timely given that public scrutiny of higher education has risen and staff members are being asked to do more with less, which is changing the working environment for these employees (Johnsrud, 2002). Therefore, understanding the factors that related to staff members’ work engagement and job satisfaction was particularly important. This chapter provides descriptive statistics of the survey respondents along with results to the study’s five research questions.

Demographic and Profile Characteristics

The survey was sent to all 294 employees working within two units at an urban Midwestern university. After three e-mail communications with the employees, 178 surveys were completed and 170 were considered usable, resulting in a response rate of 58%. The descriptive statistics for the background and profile characteristics are provided below. The statistics as well as results of the research questions were calculated using SPSS 16.0 (2007). For ease of presentation, the background and profile characteristics were clustered into individual characteristics, job characteristics, and employment background characteristics.
Individual Characteristics

Individual characteristics were defined as those demographic and profile characteristics related to the individual that were independent of the job or institution. As described below, a number of individual characteristics were collected from the survey respondents. Of the 177 total respondents, 120 (67%) were female, 46 (26%) were male, and 12 (7%) did not report their gender. The racial/ethnic identity provided by survey respondents indicated that 117 (66%) were Caucasian, 26 (15%) were African American, 13 (7%) were other underrepresented minorities including Asians (3), Hispanics (4), and Mixed/Other (6), and 22 (12%) did not report their race/ethnicity. The average age of respondents was 38 (SD = 11.87). Respondents indicated that 158 (89%) of them were born in the U.S., 7 (4%) were not, and 13 (7%) did not respond to the question. Concerning the highest degree attained, 12 (7%) respondents had earned a doctorate degree, 3 (2%) had earned a professional (e.g., JD, MD) degree, 54 (30%) had earned a master’s degree, 73 (41%) had earned a bachelor’s degree, 24 (14%) had earned a high school or associate’s degree, and 12 (7%) did not respond. Table 1 below compares the gender of the survey population and respondents and provides data on the race/ethnicity as well as highest degree earned.
Table 1

*Distribution of Survey Population and Respondents by Selected Individual Characteristics*

<table>
<thead>
<tr>
<th>Demographic or Profile Characteristic</th>
<th>Population</th>
<th>Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N (%)</td>
<td>n (%)</td>
</tr>
<tr>
<td><strong>Sex</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>205 (70%)</td>
<td>120 (67%)</td>
</tr>
<tr>
<td>Male</td>
<td>89 (30%)</td>
<td>46 (26%)</td>
</tr>
<tr>
<td>Unknown</td>
<td>--</td>
<td>12 (7%)</td>
</tr>
<tr>
<td><strong>Race/Ethnicity</strong></td>
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<td></td>
</tr>
<tr>
<td>Caucasian</td>
<td>NA</td>
<td>117 (66%)</td>
</tr>
<tr>
<td>African American</td>
<td>NA</td>
<td>26 (15%)</td>
</tr>
<tr>
<td>Mixed/Other</td>
<td>NA</td>
<td>13 (7%)</td>
</tr>
<tr>
<td>Unknown</td>
<td>NA</td>
<td>22 (12%)</td>
</tr>
<tr>
<td><strong>Highest Degree</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High School &amp; Associates</td>
<td>NA</td>
<td>24 (14%)</td>
</tr>
<tr>
<td>Bachelor’s</td>
<td>NA</td>
<td>73 (41%)</td>
</tr>
<tr>
<td>Master’s</td>
<td>NA</td>
<td>54 (30%)</td>
</tr>
<tr>
<td>Professional</td>
<td>NA</td>
<td>3 (2%)</td>
</tr>
<tr>
<td>Doctorate</td>
<td>NA</td>
<td>12 (7%)</td>
</tr>
<tr>
<td>Unknown</td>
<td>NA</td>
<td>12 (7%)</td>
</tr>
<tr>
<td><strong>NA =</strong> Not available for this study.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In addition to individual characteristics, information was also collected about the respondents’ job and work environment. In terms of organizational unit, 142 (80%) of respondents were from student affairs, 19 (11%) were from a professional school, and 17 (10%) were from another unit or did not respond. As a reminder, there were only 20 staff members working within the professional school and thus while the number of respondents from this unit was low in comparison to the student affairs unit, the overall
response rate of the unit was nearly 95%. Information on job titles was also collected and then categorized into administrative levels using the U.S. Department of Education’s (2007) two job classifications: professional staff (i.e., executive, administrative, managerial, and support/service professionals) and non-professional staff (i.e., technical and paraprofessionals, clerical and secretarial, skilled crafts, and service/maintenance). Professional staff accounted for 105 (59%) of the respondents, nonprofessional staff accounted for 41 (23%) of the respondents, and 32 (18%) did not respond. Table 2 below compares the organizational unit and administrative level of the survey population and respondents.

Table 2

<p>| Distribution of Survey Population and Respondents by Selected Job Characteristics |
|-----------------------------------------------|---------------------|</p>
<table>
<thead>
<tr>
<th>Demographic or Profile Characteristic</th>
<th>Population</th>
<th>Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>N (%)</td>
<td>n (%)</td>
<td></td>
</tr>
<tr>
<td><strong>Unit</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student affairs</td>
<td>274 (93%)</td>
<td>142 (80%)</td>
</tr>
<tr>
<td>Professional school</td>
<td>20 (7%)</td>
<td>19 (11%)</td>
</tr>
<tr>
<td>Other / Unknown</td>
<td>--</td>
<td>17 (10%)</td>
</tr>
<tr>
<td><strong>Administrative Level</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professional</td>
<td>185 (63%)</td>
<td>105 (59%)</td>
</tr>
<tr>
<td>Non-professional</td>
<td>109 (37%)</td>
<td>41 (23%)</td>
</tr>
<tr>
<td>Unknown</td>
<td>--</td>
<td>32 (18%)</td>
</tr>
</tbody>
</table>

Respondents were asked to indicate the amount of time they spent interacting with students, with 53 (30%) spending 0 – 25%, 35 (20%) spending 26 – 50%, 31 (18%) spending 51 – 75%, and 47 (27%) spending 76 – 100% of their time interacting with students. Twelve (7%) respondents did not indicate the amount of time they spend with
students. In terms of pay range, 43 (24%) employees were in the $0 – 25,000 range, 95 (54%) in the $25,001 – 50,000 range, 22 (12%) in the $50,001 – 75,000 range, 4 (2%) in the $75,001 – 100,000 range, and 2 (1%) earning more than $100,001 per year. Twelve (7%) respondents did not provide their salary range. The survey also asked respondents to report whether they were a minority by gender and race/ethnicity in their immediate work unit. Thirty-two (18%) staff members indicated they were a minority by gender, 132 (74%) indicated they were not, and 14 (8%) did not respond. In regard to minority by race/ethnicity, 35 (20%) indicated that they were a minority by race/ethnicity, 127 (71%) indicated they were not, and 16 (9%) did not respond.

Employment Background Characteristics

Similar to job characteristics, the survey also asked several questions about employees’ background at the institution and elsewhere. Respondents had been working in their current position for an average of 3.9 years ($SD = 5.30$). Respondents have been working on that campus for an average of 6.3 years ($SD = 8.01$). Fifty-five (31%) respondents indicated that they have been employed in a professional position at another institution for an average of 5.8 years ($SD = 4.66$) whereas 107 (60%) employees indicated that they have not worked at another college or university and 16 (9%) did not respond to the question.

Research Questions: The Results

This study sought to answer five research questions related to employees’ perceptions of their work life, identity, work engagement, and job satisfaction. Work life perceptions were measured by responses to 31 questions related to career support, inter-institutional networks, recognition for competence, working conditions, work unit
relationships, and external relations. Identity perceptions were measured by responses to 15 questions related to job-ability fit, work-role fit, and social support. A five-point Likert scale was used to assess the respondents’ level of agreement or disagreement with the work life and identity statements regarding work life issues, with “5” indicating “strongly agree.”

The dependent variables, work engagement and job satisfaction, were also measured through survey items. Employees’ level of work engagement was measured by their responses to nine questions related to their physical, emotional, and intellectual attachment to work. Job satisfaction was measured by responses to eight items that addressed topics such as job variety, control, autonomy, and satisfaction with work responsibility. A seven-point Likert scale was used for both dependent variables. For engagement, the scale indicated the frequency of the respondent’s feeling toward the statement with responses ranging from “never” to “every day.” For job satisfaction, the scale ranged from “extremely dissatisfied” to “extremely satisfied.”

A Principal Components Analysis with no rotation was conducted on the independent variables (i.e., work life and identity perceptions) both to determine if the survey items corresponded to the hypothesized constructs and to reduce the data to make it more meaningful. See Appendix E for the Cronbach’s alphas and factor loadings for the work life and identity constructs and corresponding survey items. The Principal Components Analysis revealed sufficient Cronbach’s alphas for each of the constructs, with all of the constructs generating alphas above the accepted sufficient level of 0.70 (Kent, 2001, p. 221). Furthermore, in all cases except for the work unit relationships construct, each of the survey items loaded adequately with the corresponding construct.
Within the work unit relationships construct, two items did not load sufficiently to include in the construct. The two items were “There is high turnover in my unit” and “I have a best friend at work.” Due to the low factor loadings (0.397 for “turnover” and 0.180 for “best friend”), these two survey questions were not included in the work unit relationships construct. After examining the work life and identity constructs, the demographic and profile characteristics, and dependent variables (i.e., work engagement and job satisfaction), the results for each research question were generated and presented below.

1. What work life items are most important to staff members?

Descriptive statistics (i.e., means and standard deviations) were calculated for each work life perception survey question and each work life construct (i.e., career support, inter-institutional networks, recognition for competence, working conditions, work unit relationships, external relations). In addition, descriptive statistics (i.e., means and standard deviations) were calculated for each identity survey item as well as the identity constructs (i.e., job fit, role fit, social support). See Appendix E for these descriptive statistics.

Staff members provided the most positive responses to the following constructs: external relations ($M = 4.07, SD = 0.58$), work unit relationships ($M = 3.80, SD = 0.74$), and social support ($M = 3.80, SD = 0.73$). These results clearly indicated that staff members perceive relationships, broadly defined, as very positive aspects of their jobs.

An examination of responses to the survey items yielded a similar focus on relationships. Furthermore, the responses indicated a positive outlook on job fit. Staff members agreed the most with the following eight survey items: positive relationships
with students \((M = 4.27, SD = 0.74)\), good relationship with colleagues \((M = 4.26, SD = 0.78)\), feeling competent and able to handle one’s job \((M = 4.24, SD = 0.87)\), positive relationship with staff \((M = 4.16, SD = 0.71)\), positive relationship with the public \((M = 4.14, SD = 0.73)\), easy to talk with other people at work \((M = 4.14, SD = 0.79)\), preparation for the job \((M = 4.02, SD = 0.94)\), and easy to talk with supervisor \((M = 4.00, SD = 1.10)\).

While those constructs had the most positive response, employees responded less positively to the constructs concerning the use of inter-institutional networks \((M = 3.18, SD = 1.10)\) and working conditions (e.g., salary and benefits) \((M = 3.27, SD = 0.77)\). In terms of survey items, employees responded less positively to the following items: satisfied with salary \((M = 2.70, SD = 1.26)\), career advice from inter-institutional networks \((M = 2.83, SD = 1.19)\), job fits future self \((M = 3.12, SD = 1.22)\), and adequate resources for unit \((M = 3.13, SD = 1.09)\).

Overall, these results indicate that staff members have experienced positive relationships with students, colleagues, and supervisors. Furthermore, they felt competent in and prepared for their jobs. Yet, they were not as positive about their working conditions and use of inter-institutional networks.

2. **Do work life perceptions of staff members vary by their demographic and profile characteristics?**

*T*-tests and an analysis of variance (ANOVA) were used to assess whether significant differences in work life perceptions exist among groups of survey respondents. A *t*-test was used for the variables of gender, minority by race/ethnicity, minority by gender, U.S. born, unit, administrative level, benefits eligibility, time spent...
with students, and employment at another institution. One-way ANOVA analysis with Levene’s tests for homogeneity of variances and post hoc analyses using Bonferroni’s test was used for the variables of race/ethnicity, salary, degree, age, years in job, years on campus, and length of employment at another institution. Notably, some categorical variables were created into distinct groups of more similar sizes for the \( t \)-test and ANOVA analyses. Furthermore, responses to continuous variables such as age and years on campus were categorized into groups to allow for an ANOVA analysis. Appendix F specifies the categorization of the variables that were found to have significant differences. Appendix F also provides means, standard deviations, and analyses statistics for the information for each of the significant differences described below.

**Individual Characteristics**

Characteristics of the survey respondents (i.e., their characteristics as individuals) were attributed to differences in their work life perceptions. As discussed below, both age and degree level were related to differences. No significant differences existed among survey respondents according to their gender, race/ethnicity, or whether they were born in the U.S.

**Age.** Significant differences existed between employees in the age range of 41 – 50 and employees who were more than 51 years old in their perceptions of the working conditions (i.e., resources, reputation, salary, physical environment, benefits) and job fit (i.e., job uses full abilities, feel competent, do things I do best, well matched, sufficient preparation). Employees age 41 – 50 \( (M = 3.02, SD = 0.76) \) reported less positive working conditions than employees who were more than 51 years old \( (M = 3.66, SD = 0.90), F(3, 149) = 3.35, p < .05 \). In addition, employees age 41 – 50 \( (M = 3.57, SD =...
felt they fit less with their jobs than employees who were more than 51 years old
\((M = 4.13, SD = 0.60), F(3, 150) = 3.51, p < .05.\)

\textit{Degree.} Significant differences also existed among employees according to their
highest degree earned. Employees with master’s degrees \((M = 3.50, SD = 1.06)\) or
professional or doctorate degrees \((M = 3.77, SD = 0.90)\) reported using their inter-
institutional networks (i.e., contact with peers for help, contact with peers for career
advice) more than employees with high school or associate’s degrees \((M = 2.63, SD =
1.02), F(3, 160) = 5.88, p < .01.\) In addition, employees with professional or doctorate
degrees \((M = 4.20, SD = 0.71)\) reported more role fit (i.e., like the identity, job fits current
self, satisfies self, job fits future self) than employees with high school or associate’s
degrees \((M = 3.24, SD = 1.01)\) and bachelor’s degrees \((M = 3.30, SD = 1.08), F(3, 160) =
3.84, p < .05.\)

\textit{Job Characteristics}

While individual characteristics were related to employees, job characteristics
were specific to the job. Significant differences in perceptions existed among respondents
according to a number of job characteristics, as discussed below. The only job
characteristic for which significant differences did not exist for employees was whether
they were a minority by gender in their work unit.

\textit{Organizational unit.} Employees working in different units had significantly
different perceptions of their working conditions (i.e., resources, reputation, salary,
physical environment, benefits) and external relations (positive relations with faculty,
staff, students, and the public). Staff members in the professional school \((M = 3.76, SD =
0.50)\) reported better working conditions than employees in student affairs \((M = 3.26, SD =
0.83)\)
Employees in the professional school ($M = 4.33, SD = 0.47$) also reported better external relationships than employees in student affairs ($M = 4.06, SD = 0.55$), $t(157) = -2.00, p < .05$.

**Administrative level.** Employees classified as professional versus non-professional had significantly different perceptions of their job fit (i.e., job uses full abilities, feel competent, do things I do best, well matched, sufficient preparation) and role fit (i.e., like the identity, job fits current self, satisfies self, job fits future self). Professional staff members reported both higher job fit ($M = 3.83, SD = 0.72$) than their non-professional colleagues ($M = 3.56, SD = 0.81$), $t(143) = -2.01, p < .05$. Professional staff members also reported higher role fit ($M = 3.56, SD = 1.02$) than their non-professional colleagues ($M = 3.02, SD = 1.09$), $t(142) = -2.79, p < .01$.

**Time with students.** Significant differences in work life perceptions and identity were also found among employees according to the amount of time they spent interacting with students. Employees who spent more than 51% of their time with students reported better external relationships (i.e., positive relationships with faculty, staff, students, and the public) ($M = 4.21, SD = 0.47$) than employees who spent less time with students ($M = 3.98, SD = 0.59$), $t(162) = -2.77, p < .01$. Furthermore, employees who spent more than 51% of their time with students reported higher role fit (i.e., like the identity, job fits current self, satisfies self, job fits future self) ($M = 3.63, SD = 0.97$) than employees who spent less time with students ($M = 3.29, SD = 1.09$), $t(162) = -2.09, p < .01$.

**Pay range.** Employees’ with different pay ranges were significantly different in their use of networks (i.e., contact with peers for help, contact with peers for career advice), job fit (i.e., job uses full abilities, feel competent, do things I do best, well...
matched, sufficient preparation), and role fit (i.e., like the identity, job fits current self, satisfies self, job fits future self). Employees earning more than $50,001 per year ($M = 3.97, SD = 0.72) reported using inter-institutional networks more than employees earning $0 – 25,000 ($M = 2.89, SD = 1.06) and those earning $25,001 – 50,000 ($M = 3.08, SD = 1.109), $F(2, 160) = 10.26, p < .01. Likewise, employees earning more than $50,001 per year indicated higher levels of both job fit ($M = 4.17, SD = 0.54), $F(2, 161) = 4.75, p < .01, and role fit ($M = 4.02, SD = 0.83), $F(2, 161) = 5.59, p < .01, as compared to staff members earning $0 – 25,000 ($M = 3.71, SD = 0.79; $M = 3.23, SD = 0.93; respectively) and those earning $25,001 – 50,000 ($M = 3.71, SD = 0.74; $M = 3.38, SD = 1.09; respectively).

Minority by race/ethnicity. Employees who reported being a racial/ethnic minority in their work unit reported significant differences in their job fit (i.e., job uses full abilities, feel competent, do things I do best, well matched, sufficient preparation), $t(158) = -2.25, p < .05$. Racial/ethnic minorities ($M = 4.05, SD = 0.67$) reported higher job fit than their colleagues who were not racial/ethnic minorities in their unit ($M = 3.73, SD = 0.75$).

Employment Background Characteristics

Employment background characteristics were those related to length of employment in a job and on the campus as well as employment at another college or university and the length of that employment. As discussed below, employees reported significantly different work life perceptions according to their length of employment on the campus and their previous employment at another college or university. No
significant differences were found among survey respondents according to the years in their current job or length of employment at another institution.

*Years on campus.* The number of years a person spent working on campus was significantly related to their perceptions of their work unit relationships (i.e., good relations with colleagues, sense of teamwork, informed about issues, good cross-unit relations, high turnover, strong leadership, best friend). Employees who had worked more than 11 years on campus ($M = 4.12, SD = 0.60$) reported better relationships than those employees who had worked on campus for 5 years or less ($M = 3.74, SD = 0.76$), $F(2, 153) = 3.17, p < .05$. In addition, employees who had worked more than 11 years on campus ($M = 3.47, SD = 0.77$) reported better working conditions (i.e., resources, reputation, salary, physical environment, benefits) than those who worked on campus for 6 – 10 years ($M = 2.96, SD = 0.85$), $F(2, 153) = 3.41, p < .05$.

*Employment at another college or university.* Whether employees had worked at another college or university indicated significant differences in their use of inter-institutional networks (i.e., contact with peers for help, contact with peers for career advice), $t(158) = -3.05, p < .01$. Employees who worked at another institution ($M = 3.55, SD = 1.06$) reported using their networks more than those who had not worked at another institution ($M = 3.00, SD = 1.06$).

To summarize, responses to work life and identity constructs varied on a number of demographic and profile characteristics. Individual characteristics that yielded differences were age and degree. Significant differences existed by the job characteristics of unit, administrative level, time with students, pay range, and minority by ethnicity.
Finally, there were significant differences in responses when considering employees’ length of time working on campus as well as employment at another institution.

3. *How are the constructs of work engagement and job satisfaction defined and measured?*

The definition and measurement of the work engagement and job satisfaction constructs was assessed by calculating a Cronbach’s alpha to measure the internal consistency of the survey items within each of the constructs. In addition, a Principal Components Analysis with no rotation was conducted using to determine whether each of the items had appropriate factor loadings. Finally, Pearson correlation coefficients were calculated to assess the relationship between work engagement and job satisfaction.

Results indicated that work engagement was defined by nine items (alpha = .914, \( M = 5.81, SD = 1.10 \)) related to employees’ physical, emotional, and intellectual attachment to work. The factor loadings of the survey items on this construct ranged from .55 to .85, which indicated that the items held together as a homogeneous and distinct construct. Job satisfaction was defined by responses to eight items (alpha = .925, \( M = 5.02, SD = 1.08 \)) that addressed topics such as job variety, control, autonomy, and satisfaction with work responsibility. The factor loadings for this construct ranged from .58 to .92, which once again indicated that the items held together as a homogeneous and distinct construct. Because the Cronbach’s alpha was greater than 0.70 for each construct, the constructs were considered to be “acceptable” or “sufficient” (Kent, 2001, p. 221). Furthermore, the factor loadings were sufficient for both work engagement and job satisfaction, and thus no survey items were dropped from these two constructs. See Table 3 for the factor loadings of the survey items on work engagement and job satisfaction.
Table 3

*Factor Loadings of Observed Items Comprising the Outcome Variables*

<table>
<thead>
<tr>
<th>Items and constructs</th>
<th>Constructs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Work Engagement</td>
</tr>
<tr>
<td><strong>Work engagement</strong></td>
<td></td>
</tr>
<tr>
<td>Feel very energetic</td>
<td>.77</td>
</tr>
<tr>
<td>Can work for long periods of time</td>
<td>.55</td>
</tr>
<tr>
<td>Enthusiastic about job</td>
<td>.85</td>
</tr>
<tr>
<td>Job inspires</td>
<td>.83</td>
</tr>
<tr>
<td>Feel like going to work</td>
<td>.81</td>
</tr>
<tr>
<td>Happy when working</td>
<td>.79</td>
</tr>
<tr>
<td>Proud of work</td>
<td>.75</td>
</tr>
<tr>
<td>Immersed in work</td>
<td>.74</td>
</tr>
<tr>
<td>Time flies</td>
<td>.82</td>
</tr>
<tr>
<td>Alpha</td>
<td>.914</td>
</tr>
<tr>
<td>Variance Explained by the Factor</td>
<td>59.51</td>
</tr>
<tr>
<td><strong>Job satisfaction</strong></td>
<td></td>
</tr>
<tr>
<td>Sufficient variety in job</td>
<td>.84</td>
</tr>
<tr>
<td>Enjoy working in position</td>
<td>.91</td>
</tr>
<tr>
<td>Input in decisions</td>
<td>.83</td>
</tr>
<tr>
<td>Freedom on the job</td>
<td>.81</td>
</tr>
<tr>
<td>Trust and confidence of my colleagues</td>
<td>.76</td>
</tr>
<tr>
<td>Satisfied with responsibilities</td>
<td>.88</td>
</tr>
<tr>
<td>Salary compensation is fair</td>
<td>.58</td>
</tr>
<tr>
<td>Overall satisfaction</td>
<td>.92</td>
</tr>
<tr>
<td>Alpha</td>
<td>.925</td>
</tr>
<tr>
<td>Variance Explained by the Factor</td>
<td>67.30</td>
</tr>
</tbody>
</table>

In addition assessing the constructs and factor loadings, Pearson correlation coefficients were used to assess the relationship between work engagement and job satisfaction. As depicted in Table 4, the relationship between work engagement and job satisfaction was substantial, $r(156) = 0.63, p < .01$. While the relationship between these
two constructs was substantial, it is not high enough to indicate multicollinearity because it is below 0.90 (Field, 2005).

Table 4

**Intercorrelations between Work Engagement and Job Satisfaction**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Work Engagement</th>
<th>Job Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engagement</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>.63*</td>
<td>--</td>
</tr>
</tbody>
</table>

Note. *p < .01.

4. What are the relationships among the domains of work life perceptions, identity, work engagement, and job satisfaction?

The relationships among work life perceptions (i.e., career support, inter-institutional networks, recognition for competence, working conditions, work unit relationships, external relations), identity (i.e., job fit, role fit, social support), work engagement, and job satisfaction were assessed using Pearson’s correlation coefficients. Table 5 provides the correlation coefficients for each of the relationships. The strength of the relationship was interpreted using the following parameters: very low (.01 - .1), low (.2 - .3), moderate (.4 - .5), substantial (.6 - .7), and very high (.8 - .9). Correlations above .90 indicate multicollinearity (Field, 2005). Each of the correlations are discussed below and all correlations indicated positive significant correlations (p < .01).

Career support had a low correlation with inter-institutional networks ($r = .39$) and external relations ($r = .38$) and a moderate correlation with working conditions ($r = .55$), job fit ($r = .59$), and work engagement ($r = .51$). Career support had a substantial correlation with recognition for competence ($r = .78$), work unit relationships ($r = .77$),
social support ($r = .70$) and job satisfaction ($r = .73$). Inter-institutional networks had a low correlation with recognition for competence ($r = .33$), working conditions ($r = .21$), work unit relationships ($r = .30$), external relations ($r = .20$), social support ($r = .27$), work engagement ($r = .29$), and job satisfaction ($r = .37$). A moderate correlation was found between networks and role fit ($r = .40$). Recognition for competence was had a moderate correlation with working conditions ($r = .56$), external relations ($r = .40$), role fit ($r = .44$), and work engagement ($r = .44$). There was a substantial correlation between recognition for competence with work unit relationships ($r = .77$), job fit ($r = .61$), social support ($r = .77$), and job satisfaction ($r = .74$). Working conditions was correlated at a moderate level with work unit relationships ($r = .53$), external relations ($r = .50$), job fit ($r = .55$), role fit ($r = .50$), social support ($r = .57$), and work engagement ($r = .52$). There was a substantial correlation between working conditions and job satisfaction ($r = .69$). Work unit relationships was moderately correlated with external relations ($r = .45$), role fit ($r = .49$), and work engagement ($r = .47$). Work unit relationships was substantially correlated with job fit ($r = .62$), social support ($r = .75$), and job satisfaction ($r = .69$). External relations had a moderate correlation with job fit ($r = .48$), role fit ($r = .44$), social support ($r = .48$), work engagement ($r = .43$), and job satisfaction ($r = .56$). Job fit was moderately correlated with social support ($r = .56$) and substantially correlated with role fit ($r = .76$), work engagement ($r = .66$), and job satisfaction ($r = .76$). Role fit was moderately correlated with social support ($r = .44$) and substantially correlated with work engagement ($r = .68$) and job satisfaction ($r = .73$). Social support was moderately correlated with work engagement ($r = .49$) and substantially correlated
with job satisfaction \((r = .70)\). Finally, as discussed previously, work engagement was substantially correlated with job satisfaction \((r = .63)\).

Table 5

*Intercorrelations among Survey Constructs*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Car</th>
<th>Net</th>
<th>Rec</th>
<th>WC</th>
<th>Rel</th>
<th>Ext</th>
<th>Job</th>
<th>Role</th>
<th>Soc</th>
<th>Eng</th>
<th>Sat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Career Support (Car)</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inter-institutional Networks (Net)</td>
<td>.39</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recognition for Competence (Rec)</td>
<td>.78</td>
<td>.33</td>
<td>--</td>
<td></td>
<td></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>Working Conditions (WC)</td>
<td>.55</td>
<td>.21</td>
<td>.56</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Work Unit Relationships (Rel)</td>
<td>.77</td>
<td>.30</td>
<td>.77</td>
<td>.53</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>External Relations (Ext)</td>
<td>.38</td>
<td>.20</td>
<td>.40</td>
<td>.50</td>
<td>.45</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job Fit (Job)</td>
<td>.59</td>
<td>.40</td>
<td>.61</td>
<td>.55</td>
<td>.62</td>
<td>.48</td>
<td>--</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Role Fit (Role)</td>
<td>.50</td>
<td>.32</td>
<td>.44</td>
<td>.50</td>
<td>.49</td>
<td>.44</td>
<td>.76</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Support (Soc)</td>
<td>.70</td>
<td>.27</td>
<td>.77</td>
<td>.57</td>
<td>.75</td>
<td>.48</td>
<td>.56</td>
<td>.44</td>
<td>--</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engagement (Eng)</td>
<td>.51</td>
<td>.29</td>
<td>.44</td>
<td>.52</td>
<td>.47</td>
<td>.43</td>
<td>.66</td>
<td>.68</td>
<td>.49</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>Satisfaction (Sat)</td>
<td>.73</td>
<td>.37</td>
<td>.74</td>
<td>.69</td>
<td>.69</td>
<td>.56</td>
<td>.76</td>
<td>.73</td>
<td>.70</td>
<td>.63</td>
<td>--</td>
</tr>
</tbody>
</table>

Note. All correlations were significant at \(p < .01\).
5. What are the demographic and profile characteristics, work life perceptions, and identity issues that explain work engagement and job satisfaction (using two regression models)?

Multiple regression analysis was used to determine which work life perceptions, identity issues, and demographic and profile characteristics simultaneously explain the work engagement and job satisfaction of staff members. Two multiple regression models were created, one for each dependent variable (i.e., work engagement and job satisfaction) with the objective of finding a parsimonious model. The results of the regression data for the work engagement and job satisfaction models are presented below.

**Work Engagement**

Multiple regression analysis was used to examine which work life and identity perceptions as well as demographic and profile characteristics explain work engagement. The overall model indicated that the following variables were significant in their relationship with work engagement: role fit (i.e., like the identity, job fits current self, satisfies self, job fits future self), job fit (i.e., job uses full abilities, feel competent, do things I do best, well matched, sufficient preparation), working conditions (i.e., resources, reputation, salary, physical environment, benefits), time spent with students, and time worked on campus. The first model accounted for 63% of the variance (37% of unexplained error) in work engagement ($R^2_{adj} = 0.625$), $F(12, 131) = 20.899$, $p < .001$. Each of the significant variables within the first model will be presented below. Non-significant variables such as gender, unit, and employment at another institution were dropped from the final model.
The construct of working conditions was a significant and positive indicator of work engagement, $t(131) = 2.60, p < .01$. Two identity perceptions, job fit, $t(131) = 2.51, p < .05$, and role fit, $t(131) = 3.72, p < .001$, were also significant and positive indicators of work engagement. Two demographic and profile characteristics were significant indicators of work engagement. Time spent interacting with students, $t(131) 3.81, p < .001$, was positively related to work engagement while length of employment on campus was a negative indicator of work engagement, $t(131) = -2.66, p < .01$. Table 6 presents the $b$-value, the standard error, the standardized beta, the $t$-value, and the significance value for each variable in the model and the adjusted squared multiple correlation and $F$ statistic for the model.
Table 6

*Multiple Linear Regression Model: Work Engagement*

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>Std. Error</th>
<th>Beta</th>
<th>t</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>1.355</td>
<td>0.446</td>
<td>--</td>
<td>3.037</td>
<td>.003</td>
</tr>
<tr>
<td>Career Support</td>
<td>0.088</td>
<td>0.125</td>
<td>0.067</td>
<td>0.708</td>
<td>.480</td>
</tr>
<tr>
<td>Networks</td>
<td>0.013</td>
<td>0.054</td>
<td>0.014</td>
<td>0.244</td>
<td>.808</td>
</tr>
<tr>
<td>Recognition</td>
<td>-0.122</td>
<td>0.119</td>
<td>-0.102</td>
<td>-1.026</td>
<td>.307</td>
</tr>
<tr>
<td>Working Conditions</td>
<td>0.258</td>
<td>0.099</td>
<td>0.194</td>
<td>2.600</td>
<td>.010 *</td>
</tr>
<tr>
<td>Relationships</td>
<td>-0.043</td>
<td>0.136</td>
<td>-0.030</td>
<td>-0.312</td>
<td>.755</td>
</tr>
<tr>
<td>External Relations</td>
<td>0.010</td>
<td>0.125</td>
<td>0.005</td>
<td>0.081</td>
<td>.935</td>
</tr>
<tr>
<td>Job Fit</td>
<td>0.325</td>
<td>0.130</td>
<td>0.232</td>
<td>2.508</td>
<td>.013 *</td>
</tr>
<tr>
<td>Role Fit</td>
<td>0.336</td>
<td>0.090</td>
<td>0.337</td>
<td>3.716</td>
<td>.000 *</td>
</tr>
<tr>
<td>Social Support</td>
<td>0.229</td>
<td>0.131</td>
<td>0.153</td>
<td>1.751</td>
<td>.082</td>
</tr>
<tr>
<td>Job Satisfaction</td>
<td>0.040</td>
<td>0.114</td>
<td>0.040</td>
<td>0.351</td>
<td>.726</td>
</tr>
<tr>
<td>Time with Students</td>
<td>0.183</td>
<td>0.048</td>
<td>0.211</td>
<td>3.813</td>
<td>.000 *</td>
</tr>
<tr>
<td>Years on Campus</td>
<td>-0.019</td>
<td>0.007</td>
<td>-0.143</td>
<td>-2.656</td>
<td>.009 *</td>
</tr>
</tbody>
</table>

$R^2_{\text{adj}} = 0.625$

$F(12, 131) = 20.899, \ p < .001.$

* $p < .05$

To summarize, five constructs and variables (i.e., working conditions, job fit, role fit, time spent with students, and time worked on campus) together accounted for 63% of the variance in work engagement ($R^2_{\text{adj}} = 0.625$). These results will be discussed in further detail in Chapter Five.
Multiple regression analysis was also used to explain which work life and identity perceptions as well as demographic and profile characteristics explain job satisfaction. The overall model indicated that the following variables were significant in their relationship with job satisfaction: career support (i.e., support for training and development, opportunities to develop skills, encouragement to develop skills, fair hiring practices, clear performance criteria, helpful feedback), recognition for competence (i.e., recognition for contributions, guidance from supervisor, trust from supervisor, authority to make decisions), working conditions (i.e., resources, reputation, salary, physical environment, benefits), external relations (i.e., positive relations with faculty, staff, students, and the public), and role fit (i.e., like the identity, job fits current self, satisfies self, job fits future self). The second model accounted for 77% of the variance (23% of unexplained error) in job satisfaction, $R^2_{adj} = 0.773$, $F(10, 138) = 51.319, p < .001$. Each of the significant variables in the second model will be presented below. Non-significant variables such as gender, unit, and employment at another institution were dropped from the final model.

Career support was a significant and positive indicator of job satisfaction, $t(138) = 2.22, p < .05$. Recognition for competence, $t(138) = 3.41, p < .001$, and working conditions, $t(138) = 3.39, p < .001$, were also significant and positive indicators of job satisfaction. Similarly, external relations also positively and significantly explained job satisfaction, $t(138) = 2.29, p < .05$. Finally, role fit was a significant and positive indicator of job satisfaction, $t(138) = 4.82, p < .001$. Table 7 presents the squared
multiple correlation for the model as well as the $b$-value, the standard error, the standardized beta, and the significance value for each variable included in the model.

Table 7

*Multiple Linear Regression Model: Job Satisfaction*

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>Std. Error</th>
<th>Beta</th>
<th>$t$</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>-.315</td>
<td>.356</td>
<td>-.886</td>
<td>.377</td>
<td></td>
</tr>
<tr>
<td>Career Support</td>
<td>.207</td>
<td>.093</td>
<td>.155</td>
<td>2.215</td>
<td>.028 *</td>
</tr>
<tr>
<td>Networks</td>
<td>.010</td>
<td>.042</td>
<td>.010</td>
<td>.231</td>
<td>.818</td>
</tr>
<tr>
<td>Recognition</td>
<td>.300</td>
<td>.088</td>
<td>.249</td>
<td>3.414</td>
<td>.001 *</td>
</tr>
<tr>
<td>Working Conditions</td>
<td>.249</td>
<td>.073</td>
<td>.184</td>
<td>3.387</td>
<td>.001 *</td>
</tr>
<tr>
<td>Relationships</td>
<td>-.029</td>
<td>.103</td>
<td>-.020</td>
<td>-.286</td>
<td>.775</td>
</tr>
<tr>
<td>External Relations</td>
<td>.207</td>
<td>.090</td>
<td>.110</td>
<td>2.286</td>
<td>.024 *</td>
</tr>
<tr>
<td>Job Fit</td>
<td>.106</td>
<td>.101</td>
<td>.074</td>
<td>1.049</td>
<td>.296</td>
</tr>
<tr>
<td>Role Fit</td>
<td>.323</td>
<td>.067</td>
<td>.322</td>
<td>4.823</td>
<td>.000 *</td>
</tr>
<tr>
<td>Social Support</td>
<td>.073</td>
<td>.099</td>
<td>.048</td>
<td>.731</td>
<td>.466</td>
</tr>
<tr>
<td>Engagement</td>
<td>.014</td>
<td>.062</td>
<td>.014</td>
<td>.229</td>
<td>.819</td>
</tr>
</tbody>
</table>

$R^2_{adj} = 0.773$

$F(10, 138) = 51.319, p < .001$

* $p \leq .05$

To summarize, career support, recognition for competence, working conditions, external relations, and role fit together accounted for 77% of the variance in job satisfaction ($R^2_{adj} = 0.773$). Interestingly, no demographic and profile characteristics
significantly explained job satisfaction and were dropped from the final model. These results will be interpreted and discussed in Chapter Five.

Summary of Results

The purpose of this study was to examine the relationships among work life perceptions, identity, demographic and profile characteristics, work engagement, and job satisfaction. Descriptive statistics were calculated for each survey item, which indicated the items employees perceived as most important. In addition, t-tests and one-way ANOVAs determined differences that exist in employee perceptions according to their demographic and profile characteristics. The constructs of work engagement and job satisfaction were then defined and measured. Next, Pearson correlation coefficients were calculated to determine the strength of the relationships among both the independent and dependent variables. Finally, multiple regression analyses were completed to determine which demographic and profile characteristics, work life perceptions, and identity issues simultaneously explain work engagement and job satisfaction. The results presented in this chapter will be discussed in the next chapter.
CHAPTER FIVE
DISCUSSION

This study examined work life perceptions, identity, work engagement, and job satisfaction by analyzing higher education staff members’ responses to a survey instrument. Conducted at an urban Midwestern four-year, public, doctoral-granting research university with high research activity, the study considered factors that explain the work engagement and job satisfaction of university staff members (Carnegie, n.d.). The purpose of this chapter is to discuss the study’s findings in light of previous literature and theory. In addition, this chapter will discuss the implications of the findings on theory, policy, and practice as well as the limitations of the study and recommendations for future research.

Summary of the Study

Of the over 3.5 million individuals employed in higher education institutions in 2006, 58% were professional and nonprofessional staff members, which is up from 48% in 1993 (U.S. Department of Education, 2008). The growth in staff members comes at a time of increased public concern about “rising costs, the seeming lack of attention to undergraduate education, and the sometimes irrelevance of research” (Johnsrud, 2002, p. 380). These concerns have resulted in “strained budgets … which have an impact on salaries and working conditions” (Johnsrud, 2002, p. 380). Therefore, some institutions are looking for ways to motivate employees while at the same time increase productivity. Job satisfaction and work engagement studies may provide the information needed to meet these sometimes conflicting goals of increased motivation and productivity.
Previous literature indicated that levels of work engagement and job satisfaction were related to specific work life perceptions as well as demographic and profile characteristics. In addition, in earlier studies, identity issues were considered in relation to work engagement and job satisfaction, with work engagement research more focused on job and role fit and job satisfaction research more focused on social support. Therefore, this study drew upon the conceptual framework provided by Kahn (1990) in work engagement research and the model provided by Rosser (2004) in job satisfaction studies to explore the relationships among work life perspectives, identity issues, demographic and profile characteristics, work engagement, and job satisfaction.

Discussion of Results

This study sought to answer five research questions. The findings for each of the research questions were presented in Chapter Four. Below is a discussion of the results for each question within the context of existing literature and theory. The discussion of implications for theory and policy will follow.

1. What work life items are most important to staff members?

Staff members indicated that relationships, broadly defined, were a positive aspect of their jobs. Specifically, they reported positive responses to their work unit relationships, the social support they received from supervisors and colleagues, and external relationships. The staff members’ focus on relationships corresponded with higher education staff member job satisfaction literature, which indicated that both internal and external relationships were important to higher education staff members.

In terms of internal work unit relationships, Scott (1978) noted that employees in both education and industry had a need for friendship and a sense of belonging within
their workplace. Likewise, Austin (1985) found that job satisfaction was linked to environments that were more caring and more cooperative. More recently, studies have shown that teamwork was positively associated with job satisfaction whereas conflict was negatively associated with job satisfaction (Volkwein & LaNasa, 1999; Volkwein et al., 1998; Volkwein & Parmley, 2000). Furthermore, perceptions of discrimination were negatively related to job satisfaction (Johnsrud & Rosser, 1999; Rosser, 2004).

External relationships were also important to staff members. External relations include relationships with faculty, staff, students, and the public. Again, this finding mirrored the results of previous studies. In terms of their relationships with faculty, staff, and students, staff members were once again seeking a sense of community and cooperation within their workplace (Austin, 1985; Scott, 1978). Moreover, staff members sought positive relationships with the public beyond the institution because one facet of their jobs is to serve as a liaison with groups external to the school, including the community, businesses, and government (Scott, 1978). Studies have found that positive external relations were related to the job satisfaction of staff members (Johnsrud & Rosser, 1999; Rosser, 2004).

While staff members provided positive responses to their internal and external work relationships, their least positive responses were to issues of working conditions and the use of inter-institutional networks. The working conditions construct included salary, benefits, physical work environment, unit resources, and institutional reputation. Previous studies have not found working conditions to be one of the key issues for higher education staff members. Yet, in this study, staff members provided some of their least positive responses to this construct. The finding in this study may have reflected the
resources of this particular institution and the environment in which it operates. The concern about working conditions might have been foreshadowed by Johnsrud’s observation in 2002 that there has been growing public pressure on institutions, which resulted in “strained budgets … which have an impact on salaries and working conditions” (Johnsrud, 2002, p. 380).

In addition to less positive responses to working conditions, employees also indicated less positive responses to survey items concerning their use of inter-institutional networks. The less positive response regarding inter-institutional networks was an interesting finding given that Scott (1978) found that staff members’ relationships with peers at other institutions were an important component of staff members’ work lives. He argued that peers at other schools formed staff members’ professional network, served as role models, and guided staff members in their career development (Scott, 1978). As a result of the inter-institutional networks, staff members had a greater commitment to their jobs and careers (Scott, 1978). Likewise, other studies found that “professional activities and career development continue to be perennial issues affecting” job satisfaction (Rosser & Javinar, 2003, p. 823) and that there was a positive relationship between career support and job satisfaction (Johnsrud et al., 2000; Rosser, 2004). For many employees, particularly at the mid-level, career development occurs in part through contact with colleagues in similar positions at other institutions. Given the literature, the responses to the use of inter-institutional networks were surprising for this study. Yet, as will be noted below, there were demographic differences in employees’ use of inter-institutional networks.
2. Do work life perceptions of staff members vary by their demographic and profile characteristics?

Results of this study indicated that work life and identity perceptions varied by a number of demographic and profile characteristics. Differences were found in characteristics specific to the individual, to the job, and to the individual’s employment background. Each of the differences will be discussed below.

Work Life Perceptions by Individual Characteristics

The employees’ characteristics as individuals were attributed to differing work life perceptions. Both employees’ age and highest degree pointed to differences in their perceptions. Employees who were 51 years old or older reported both better working conditions and higher job fit than employees in their 40s. This finding was interesting given that previous research did not yield similar results. In fact, in work engagement studies, age had such a weak positive relationship to engagement researchers noted that “although in many cases statistically significant, these correlations generally lacked practical significance” (Schaufeli et al., 2006, p. 711). Likewise, job satisfaction studies found that age either had no relationship or a negative relationship to job satisfaction (Volkwein & Parmley, 2000; Volkwein & Zhou, 2003).

Yet, the job satisfaction studies found that age was positively related with a positive work climate, satisfactory relations with others, and teamwork – issues that seem to contribute to job satisfaction overall according to Volkwein and Parmley (2000) as well as Volkwein and LaNasa (1999). Given that research has found age to be related to other work life issues, it seems logical that age is related to working conditions.
There are several possible reasons why the differences in this study existed between employees over age 51 and those in their 40s. Employees in their 40s could have been less positive about their working conditions and job fit because they are in the middle of their working careers. They are probably aiming for higher positions and thus their current position does not fit their skill set. Alternatively, they could be coming to terms with career progress thus far. Thus, they might not see a high level of fit between their current positions and where they want to or had envisioned themselves to be at this point in their career.

Similar logic can also be applied to working conditions. Employees in their 40s may well have expected higher salaries and better benefits at this point in their career. Additionally, employees in their 40s may be balancing their own financial goals with their care-giving responsibilities and thus higher salaries and better benefits become even more important.

In addition to age, staff members’ educational degree pointed to differences in perceptions. Employees with master’s degrees as well as professional or doctorate degrees reported using their inter-institutional networks more than employees with high school or associate’s degrees. Furthermore, employees with professional or doctorate degrees reported higher role fit than employees with high school or associate’s degrees and bachelor’s degrees. This finding was not supported in existing work engagement and job satisfaction literature; therefore, presented below are possible explanations of this finding.

Logically speaking, it seems reasonable that staff members with professional or doctorate degrees use their inter-institutional networks more than other employees. First,
those with higher degrees have likely established more robust professional networks while earning their degrees. In addition, staff members with more advanced degrees are likely to belong to professional associations, which provide access to professional networks. Finally, it is likely that employees with professional and doctorate degrees are in positions that require specific knowledge and expertise that is gained through interactions with colleagues in similar roles at other institutions.

In terms of role fit, staff members with higher degrees have, in a sense, self-selected into their role through the educational process. They have spent time and effort preparing for the role and thus opted into the role as they went through the educational process. In addition, one aspect of earning an advanced degree is professional socialization. Therefore, those employees with more advanced degrees have had more exposure to the role and role models and thus might have been considering issues of role fit over an extended period of time.

*Work Life Perceptions by Job Characteristics*

In addition to individual characteristics, several job characteristics indicated significant differences in work life perceptions. Employees working in different units had significantly different perceptions of their working conditions and external relations, with staff members in the professional school reporting both better working conditions and better external relations than employees in student affairs.

Research has shown that differences in higher education staff members’ perceptions of their work life varied by their organizational unit with those working in student and academic affairs, areas that are closer to the educational mission of the institution, reporting higher job satisfaction than those working in business services.
(Scott, 1978; Volkwein & LaNasa, 1999; Volkwein & Parmley, 2000; Volkwein & Zhou, 2003). Yet, the units included in this study, student affairs and a professional school, both reflect the areas that have reported higher job satisfaction in previous studies (i.e., student affairs, academic affairs). Thus, it is perplexing as to why the professional school employees reported more positive work life perceptions of working conditions and external relations. Possible explanations for these differences are presented below.

Perhaps the difference in working conditions in the professional school is due to higher levels of resources for both the employees in terms of salaries and physical working environments as well as the unit overall in terms of resources and reputation. In addition, it could be that those employees working in an academic unit feel more tied to the academic mission of the institution and thus are more satisfied (Scott, 1978). Concerning external relations (i.e., relations with faculty, staff, students, and the public), it may be that the lower number of staff members working in the professional school versus student affairs is playing a role. Perhaps the smaller unit size is allowing for more in-depth interactions with faculty, fellow staff members, students, and the public, thereby increasing the positive regard for those relationships.

In addition to differences by unit, there were also significant variations in perceptions by administrative level. Staff members working in professional versus non-professional positions reported higher job fit and role fit. These findings are supported to some degree in the literature. While the engagement literature did not exclusively address administrative level and fit, the engagement literature has found that professionals report higher levels of engagement than blue-collar workers (Schaufeli et al., 2006). Moreover, the higher education literature has found that those in professional positions report higher
job satisfaction than those in non-professional positions (Volkwein & LaNasa, 1999; Volkwein & Parmley, 2000; Volkwein & Zhou, 2003). While the finding of this research was specific to fit, it seems likely that this finding is congruent with earlier research.

Schaufeli and Salanova (2007) argue that the higher engagement of professional employees may be because they demonstrate more “proactivity, initiative, and commitment” than non-professional colleagues (p. 149). While individual attributes play a role in engagement, it could also be that professional employees are in positions that allow for more decision-making authority, autonomy, and variety thereby providing more space, so to speak, for the individual to fit into the job and the role. Additionally, higher job and role fit may well be related to how staff members are treated by others when performing their jobs and roles. For example, if professional employees are provided more respect and status, it could be that they are more willing to accept their roles in the organization. Thus, professional positions themselves as well as other employees’ reactions to those in professional positions may lead to higher job and role fit.

In addition to differences by position, employees’ perceptions varied according to the amount of time they spent with students. Employees who spent more than 51% of their time with students reported better external relationships and higher role fit than employees who spent less time with students. These findings could be related to previous studies that found that employees working in areas more closely related to the educational mission of the institution reported higher job satisfaction than those working in other areas of the school (Scott, 1978; Volkwein & LaNasa, 1999; Volkwein & Parmley, 2000; Volkwein & Zhou, 2003). Employees who spend more time with students may feel more tied to the mission of the institution, which is likely to be important to
employees who have chosen to work in higher education versus business or industry. By choosing to work in higher education, employees are also choosing to work with students. Therefore, it is not surprising but, from a student services perspective, it is encouraging that staff members who interact more with students report more positive work life perceptions.

Pay range also indicated different perceptions of work life issues. Employees earning more than $50,001 per year used inter-institutional networks more than employees earning less money. In addition, employees earning more than $50,001 reported higher levels of both job fit and role fit as compared to staff members earning lower salaries. The literature on work engagement and job satisfaction cannot explain these findings. Thus, hypotheses are presented below.

The reason for these differences could be very similar to the reasons why there are differences by professional versus non-professional positions and differences by highest degree earned. Within a college or university, higher levels of pay often indicate professional positions that require higher degrees. Furthermore, higher pay usually indicates positions that require more decision making and responsibility. Therefore, it seems logical that those employees in highly paid positions use inter-institutional networks more than those who are paid less. In addition, in order to achieve highly paid positions, employees typically must demonstrate skill and competence in the job. Therefore, it makes sense that highly paid employees are reporting more job fit. Regarding role fit, highly paid positions may possibly be those that enable people to take on the role of the position more easily.
Finally, employees who reported being a racial/ethnic minority in their work unit reported significant differences in their job fit with racial/ethnic minorities reporting higher job fit than their colleagues. This finding was surprising and is not supported in work engagement and job satisfaction literature. In fact, previous job satisfaction studies in higher education found that being minority in a work unit was not related to job satisfaction (Rosser, 2004; Rosser & Javinar, 2003).

Although this finding is not supported by the existing literature, it is worthwhile to consider the reason for the difference because one could argue that it would be better to find no differences by minority status than to find the racial/ethnic minorities within a unit have higher job fit. One could speculate several reasons for this difference. First, are minorities in work units reporting higher job fit (i.e., work utilizes full abilities, feel competent, do the things I do best, well matched with job, sufficient preparation for the job) because they are over qualified for their positions? Could it be that they do not see others like them in higher positions, so they are accepting the positions they have? The reasons for the difference in job fit by minority status are unknown at this time and requires additional research.

Work Life Perceptions by Employment Background Characteristics

Work life perceptions also varied by two employment background characteristics, length of employment on campus and previous employment at another college. The results indicated that staff members who had been on campus for more than 11 years perceived better work unit relationships and better working conditions than employees with less time on campus. Previous job satisfaction research on length of service to an institution has yielded mixed results. Rosser and Javinar (2003) found no relationship
between job satisfaction and the number of years a staff member was working at an
institution. However, Volkwein and Zhou’s (2003) study found a positive relationship
between length of service and job satisfaction.

Although there were mixed results in previous job satisfaction studies, there could
be logical explanations for the differences in perceptions according to staff members’
tenure on campus. It might be that staff members who had been on campus longer have
had more time to develop and maintain trusting relationships with colleagues as
compared to those who have been on campus for shorter periods of time. In terms of
working conditions, staff members with more than 11 years on campus could have
reported better working conditions because it is unlikely that they would have stayed
working at the institution if they found the overall working conditions on campus to be
poor. Furthermore, their experience on campus might have helped them to secure a
position that provided better working conditions.

Whether employees had worked at another college or university also indicated
significant differences in their perceptions. Employees who worked at another institution
used their networks more than those who had not worked at another institution. This
finding was not addressed in existing literature, but it was not surprising. One can
logically expect that those employees who have worked at another institution have
ongoing relationships with former colleagues, which would make it easier and more
comfortable to contact and be contacted by former coworkers.

To summarize, staff members’ demographic and profile characteristics indicated
variations in responses to work life and identity constructs. Significant differences existed
by individual and job characteristics as well as employment history characteristics.
Information on these differences provided a more robust understanding of the perceptions of survey respondents.

3. How are the constructs of work engagement and job satisfaction defined and measured?

Work engagement and job satisfaction were defined and measured by specific survey items designed to assess staff members’ perceptions of those work perspectives. The survey items had been used in previous research on work engagement and job satisfaction. Thus, it was not surprising that this research found that the work engagement and job satisfaction constructs corresponded to the appropriate survey items, which had been used in prior studies.

The findings also indicated that work engagement and job satisfaction were two distinct but related constructs. This was an interesting finding for the study because it previous literature had not tested whether they were the same in the higher education environment. A discussion of these findings is provided below.

In this study, work engagement was measured using a modified version of the nine-item Utrecht Work Engagement Scale (UWES) developed by Schaufeli et al. (2006). The UWES incorporated the physical, emotional and intellectual dimensions of engagement, which were found to be important in other engagement research (Kahn, 1990; May et al., 2004; Saks, 2006). The UWES was chosen for this study because it has been tested in multiple countries, various fields, and a range of occupations. Yet, it had not been tested in the U.S. higher education environment. This study explored whether the UWES definition and measurement of work engagement were reliable in the higher
education environment. The results of this study supported the existing research as to the definition and measurement of engagement.

The construct of job satisfaction was measured using modified and adapted survey items from Rosser’s (2004) job satisfaction study. The eight survey items included statements related to job variety, job enjoyment, control, autonomy, confidence of colleagues, satisfaction with work responsibility, salary compensation, and overall job satisfaction. The statistical analysis used in this study indicated that each of the eight survey items were reliable measures of the job satisfaction construct.

The definitions of work engagement and job satisfaction in this study corresponded to the definitions used in previous studies on work engagement and job satisfaction. Thus, this study gave support to the previously used definitions of work engagement and job satisfaction. In terms of engagement, this finding is particularly helpful as the construct and corresponding survey items had not yet been examined in the higher education literature.

In addition to defining and measuring the constructs of work engagement and job satisfaction, data indicated that the two constructs are distinct yet related concepts. In other words, they were considered to be substantially related to one another, but they were not multicollinear. The fact that work engagement and job satisfaction were distinct constructs was an important finding for this study because the relationship between work engagement and job satisfaction has not been examined in the higher education literature. Thus, it was not yet known whether these two constructs were actually measuring the same employee perceptions within a higher education environment.
While the relationship between work engagement and job satisfaction has not been examined in the higher education literature, the engagement literature had found that they were two different constructs (Gostick & Elton, 2007; Saks, 2006; Schaufeli & Salanova, 2007). The literature was divided in its assessments of the relationship between work engagement and job satisfaction. A limited number of engagement studies found that engagement was a precursor to job satisfaction (Saks, 2006; Schaufeli & Salanova, 2007). Yet, this study did not find that job satisfaction contributed to work engagement or work engagement to satisfaction. Thus, this study did not support the previous studies that found that satisfaction is an antecedent of engagement.

While some studies found that job satisfaction was a precursor to work engagement, other researchers argued that they were not. Indeed, Gostick and Elton (2007) also argued that work engagement and job satisfaction are two different constructs, yet they proposed that the two constructs coexist at the same time within an employee. They did not argue that job satisfaction is an antecedent of work engagement. According to Gostick and Elton (2007), employees can be surveyed on both work engagement and job satisfaction, and that their responses would place them on a satisfaction – engagement matrix.

The findings from this study support the approach taken by Gostick and Elton (2007). As noted above, results indicated that work engagement and job satisfaction were two separate constructs. Furthermore, work engagement did not significantly explain job satisfaction and job satisfaction did not significantly explain engagement. Thus, this study’s findings supported the idea that work engagement and job satisfaction are two distinct constructs that coexist within an individual.
4. What are the relationships among the domains of work life perceptions, identity, work engagement, and job satisfaction?

Previous research on both work engagement and job satisfaction indicated that a number of factors were related to engagement and satisfaction. This study supported earlier research by finding that the work life and identity constructs included in this study were related to both work engagement and job satisfaction. Moreover, none of the relationships among work life perceptions, identity issues, work engagement, and job satisfaction indicated multicollinearity, which means that each of the constructs were distinct from one another. The distinctiveness of the constructs was supported by earlier research in job satisfaction and work engagement, which argued that there are unique life perceptions and identity issues that comprise an individual’s work experience.

In terms of work engagement, this study found that both work life perceptions and identity issues were related to work engagement. These findings are supported by work engagement studies that examined factors related to engagement. In terms of work life issues, work engagement literature has found the following issues to be related to engagement, including autonomy and control (Bakker, Hakanen, Demerouti, & Xanthopoulou, 2007; Harter et al., 2002; Kahn, 1990; Llorens, Bakker, Schaufeli & Salanova, 2006; May et al., 2004; Saks, 2006), job characteristics (Harter et al., 2002; Kahn, 1990; Llorens et al., 2006; May et al., 2004; Saks, 2006), organizational norms (Bakker et al., 2007; Harter et al., 2002; Kahn, 1990), and professional development opportunities (Harter et al., 2002). In addition to work life issues, identity issues have also been considered in work engagement literature. Specifically, the literature has found a relationship between engagement and identity issues (Harter et al., 2002; Kahn, 1990;
May et al., 2004) as well as between engagement and positive relationships (Bakker et al., 2007; Harter et al., 2002; Kahn, 1990; Llorens et al., 2006; May et al., 2004).

Like the findings vis-à-vis work engagement, this study also found that work life and identity issues are related to job satisfaction. Existing literature on job satisfaction research has indicated that a number of factors were related to job satisfaction. Some of the work life factors considered in previous studies have included responsibility without authority (Johnsrud, 1996; Rosser, 2000, 2004; Scott, 1978), lack of recognition (Johnsrud, 1996; Johnsrud & Rosser, 1999; Johnsrud, Heck, & Rosser, 2000; Rosser, 2000, 2004; Scott, 1978), advancement opportunities (Johnsrud, 2004; Johnsrud et al., 2000; Johnsrud & Rosser, 1999; Rosser, 2000; Scott, 1978), training and development (Johnsrud et al., 2000; Scott, 1978), and professional association orientation (Scott, 1978). In addition, identity issues related to social support have been included in job satisfaction studies. These issues have included discrimination (Austin, 1985; Johnsrud & Rosser, 1999; Rosser, 2004; Scott, 1978; Volkwein & LaNasa, 1999; Volkwein, Malik & Napier-Prancl, 1998; Volkwein & Parmley, 2000), connections between people and groups (Austin, 1985; Johnsrud, 1996; Johnsrud & Rosser, 1999; Rosser, 2000, 2004; Scott, 1978), and relationships with external constituents (Johnsrud & Rosser, 1999; Rosser, 2004; Scott, 1978).

It is not surprising, then, that this study found relationships among the work life perceptions, identity, work engagement, and job satisfaction. This finding was expected given the existing research on work engagement and job satisfaction. Therefore, this study indicated that there are multiple and distinct factors related to work engagement and job satisfaction.
5. What are the demographic and profile characteristics, work life perceptions, and identity issues that explain work engagement and job satisfaction (using two regression models)?

In addition to confirming the relationships among constructs included in the study, this research project also sought to examine which demographic and profile characteristics, work life perceptions, and identity issues explain higher education staff members’ work engagement and job satisfaction. To answer this research question, two multiple regression models were created, one for work engagement and the other for job satisfaction. The models indicated which factors were significant in explaining work engagement and job satisfaction. The findings from both models are discussed below.

Work Engagement

The work engagement regression model indicated that five factors were related to employees’ engagement. The five issues were working conditions, job fit, role fit, time spent interacting with students, and length of employment on campus. Below is a discussion of each of these issues.

Working conditions. The construct of working conditions (i.e., salary, benefits, physical work environment, unit resources, and institutional reputation) was positively associated with work engagement, indicating that better working conditions lead to higher work engagement. Previous work engagement literature did not specifically find that working conditions as defined in this study were related to work engagement. However, previous work engagement studies have found a number of other work life perceptions to be related to work engagement, including autonomy and control (Bakker, Hakanen, Demerouti, & Xanthopoulou, 2007; Harter et al., 2002; Kahn, 1990; Llorens,
Bakker, Schaufeli & Salanova, 2006; May et al., 2004; Saks, 2006), job characteristics such as variety, challenge, and feedback (Harter et al., 2002; Kahn, 1990; Llorens et al., 2006; May et al., 2004; Saks, 2006), organizational norms (Bakker et al., 2007; Harter et al., 2002; Kahn, 1990), and professional development opportunities (Harter et al., 2002).

The difference between the existing engagement literature and this study may be due to the context in which this study took place. The respondents to this study were employees at a public university in the Midwest. It may be that resources such as salary, benefits, and unit funding were more of an issue in that environment and at that institution than in other types of organizations in other locations and thus working conditions may have played a more prevalent role in the work engagement of employees included in this study.

Job fit and role fit. Like working conditions, the identity constructs of job fit and role fit were positively related to work engagement. In other words, higher levels of job fit as well as role fit indicated higher levels of work engagement. These findings are not surprising given the existing literature on engagement and Goffman’s (1961) theory on role embracement. Because the existing engagement literature does not clearly delineate job versus role fit, these two issues will be discussed together with the caveat that they were found to be separate and distinct issues in this study.

Previous research on work engagement has found that job fit, or doing what one does best at work, was related to work engagement (Harter et al, 2002). Kahn (1990) and May et al. (2004) found similar results, though their discussions were more focused on the identity aspects of employees’ fit with their positions. Although those engagement studies did not clearly distinguish between job and role fit, an argument could clearly be
made that both job and role fit were found to be positive indicators of work engagement in the existing literature.

Unlike earlier engagement studies, this study made a clear distinction between job fit and role fit. This distinction was made because of Goffman’s (1961) theory on role embracement. Goffman’s (1961) use of the term “role embracement” was very similar to more recent definitions of work engagement. When discussing role embracement, Goffman theorized that the extent to which people embrace roles is dependent upon their level of (a) “admitted or expressed attachment to the role,” (b) “a demonstration of the qualifications and capacities for performing it,” and (c) “spontaneous involvement in the role activity at hand, that is, a visible investment of attention and muscular effort” (p. 106). While he stepped away from the third aspect, “spontaneous involvement,” Goffman (1961) sustained his argument that role embracement was related to both attachment to the role and the capacity to perform the role. Building on these ideas, this study operationalized Goffman’s thoughts regarding role attachment and capacity to perform as “role fit” and a role as “job fit,” respectively.

The findings of this study supported Goffman’s (1961) theory of role embracement by indicating that job fit and role fit were two distinct issues that were related to work engagement. While the existing literature on engagement hinted at this finding, previous engagement studies did not clearly distinguish between job and role fit (Harter et al., 2002; Kahn, 1990; May et al., 2004). Yet, Goffman (1961) argued that this distinction was important. This study supported Goffman’s (1961) separation of the two issues while at the same time supported Goffman (1961) as well as the existing
engagement literature (Harter et al., 2002; Kahn, 1990; May et al., 2004) by finding that issues of job and role fit were important to work engagement.

*Time spent with students.* Time spent interacting with students was also positively related to work engagement, which meant that staff members who spent more time with students had higher levels of engagement. This finding can be supported by existing work engagement literature. Previous studies on work engagement have found that good relationships with clients, in addition to relationships with supervisors and colleagues, relate to higher levels of engagement (Bakker et al., 2007; Harter et al., 2002; Kahn, 1990; Llorens et al., 2006; May et al., 2004). While speaking more generally about relationships, Kahn (1990) explained these finding by stating that positive relationships result in “supportive and trusting” interactions that “promoted dignity, self-appreciation, and sense of worthwhileness” and “are an invaluable source of meaning in people’s lives” (pp. 707-708). Therefore, it was not surprising that spending time with students, some of the key “clients” of higher education institutions, resulted in higher levels of engagement.

Whereas work engagement literature has not specifically examined relationships between staff members and university students, studies on job satisfaction in higher education have considered the issue. Job satisfaction studies have found that employees working in student affairs and academic services have higher job satisfaction than those working in business services (Volkwein & LaNasa, 1999; Volkwein & Parmley, 2000; Volkwein & Zhou, 2003). In addition, those working more closely with the academic mission of the institution have higher job satisfaction (Scott, 1978). While these findings were related to job satisfaction and not work engagement, it is likely that there is
similarity in the underlying factors that influenced the findings of this study and the findings of previous higher education job satisfaction studies.

*Length of employment on campus.* Whereas working conditions, job fit, role fit, and time spent with students were all positively related to work engagement, length of employment on campus was a negative indicator of work engagement. That is to say, the longer employees have been working on campus, the lower their level of work engagement. This finding was surprising. The work engagement literature found age, which one could argue is related to length of employment, had a weak and positive relationship with work engagement (Schaufeli et al., 2006). Furthermore, the job satisfaction literature found either no relationship or a positive relationship between length of employment on campus and job satisfaction. For example, Volkwein and Zhou (2003) found a positive relationship between length of service and job satisfaction and Rosser and Javinar (2003) found no relationship between the job satisfaction and the number of years staff members were working at the institution. However, Rosser and Javinar (2003) did find a negative relationship between length of employment on campus and “morale,” another work-related construct included in their study that focused on the organizational climate. Perhaps, then, given the findings of this study, there are links between work engagement and the construct of “morale.” This idea could be explored further in future research.

To summarize, in this study, work engagement was related to working conditions, job fit, role fit, time spent with students, and length of employment on the campus. While some of these findings were surprising, others supported the existing literature on work engagement. In some cases, the higher education job satisfaction literature, though not
directly related to work engagement, was able to shed light on the findings of this study. This study’s findings on job satisfaction are discussed below.

**Job Satisfaction**

The job satisfaction regression model indicated that five factors were related to employees’ satisfaction. The five issues were career support, recognition for competence, working conditions, external relations, and role fit. No demographic and profile characteristics were found to explain job satisfaction. Below is a discussion of each of these factors that explained job satisfaction.

**Career support.** Career support was a significant and positive indicator of job satisfaction. Career support was defined as support for training and professional development, opportunities and encouragement to develop further skills, fair hiring practices, clear performance criteria, and helpful feedback on performance. The fact that this study found that career support was related to job satisfaction was not surprising given the existing literature on higher education staff member job satisfaction. Career support, especially training and development opportunities, was found to be one of the top issues for employees in higher education. As Johnsrud et al. (2000) argued, “When mobility is limited or difficult [due to limited advancement opportunities in higher education], it becomes all the more important to enhance professional growth within the institution” (p. 40). In addition, Rosser (2000) noted that staff members are “interested in improving their ability to do the job they have as well as gaining the skills and experience necessary to take on new and more challenging positions” (p. 9). Finally, Scott (1978) found that staff members were eager to learn and want to keep up with the changes in
their field (Scott, 1978). The findings of this study were clearly supported this previous literature.

Recognition for competence. Recognition for competence was also important to staff members in this study. Once again, this finding was not surprising given the previous literature on the topic. Like career support, recognition emerged in previous studies as a critical issue for higher education employees. As Rosser (2004) noted, staff members “want to be recognized and respected for their contribution and expertise within the institution and their work units” (p. 330). As one might expect, a lack of recognition was linked to lower job satisfaction (Johnsrud, 1996; Johnsrud & Rosser, 1999; Johnsrud et al., 2000; Scott, 1978).

In addition to supporting the findings of previous studies in terms of recognition for competence specifically, this study also supported the existing literature on staff members’ lack of authority to make decisions. Lack of authority is arguably a more subtle way to fail to recognize an employee’s competence. The issue of staff members’ lack of authority and its negative consequences on job satisfaction has been discussed in the previous literature (Johnsrud, 1996; Rosser, 2000, 2004; Scott, 1978).

Working conditions. Working conditions, or the resources provided to employees in their work unit, were found to be positively related to job satisfaction, which means that better working conditions were linked to higher job satisfaction. This finding was surprising in terms of the existing literature but made sense logically. Previous studies on the job satisfaction of university employees did not finding working conditions to be critical to job satisfaction. Indeed, even when studies specifically examined pay and its relationship to job satisfaction, the results were mixed in that the studies found positive,
negative, and no relationship between salary and job satisfaction (Austin, 1985; Johnsrud & Rosser, 1999; Rosser & Javinar, 2003). It is unclear why working conditions emerged as a key issue in this study. However, as noted above in the discussion of working conditions and work engagement, it may also be that working conditions were related to job satisfaction in this study due to the internal and external environment in which the employees are working. The employees are working at an urban public university in the Midwest. The university, like many other institutions, has faced difficult budget situations. Perhaps these fiscal constraints have played out in the results of this study.

*External relations.* In addition to working conditions, external relationships were related to job satisfaction. This study found that staff members’ better relationships with faculty, staff, students, and the public were linked to their higher job satisfaction. This finding was expected given the previous studies on employee job satisfaction in higher education. Previous studies have found that positive relationships within a work unit and the institution are important to staff members (Johnsrud & Rosser, 1999; Rosser, 2004; Scott, 1978; Volkwein & LaNasa, 1999; Volkwein & Parmley, 2000; Volkwein et al., 1998). In terms of external relationships, studies have again found that positive relationships were related to higher job satisfaction (Johnsrud & Rosser, 1999; Rosser, 2004). Thus, the findings of this study supported the existing literature.

*Role fit.* In addition to the work life perceptions discussed above, the identity issue of role fit was also related to job satisfaction. Results indicated that the higher the staff members’ role fit, the higher the job satisfaction. This finding was interesting because role fit has not been included in higher education job satisfaction studies. However, the finding was not surprising given the literature on job or role fit and work
engagement. In the engagement literature, the importance of one’s fit with one’s work has been emphasized in a number of studies (Harter et al., 2002; Kahn, 1990; May et al., 2004). The discussion above concerning the work engagement regression model provided details on the findings in the engagement literature.

Notably, though, this study did not find job fit to be a significant indicator of job satisfaction, which was a surprising finding and one that was in contrast to findings for work engagement, as discussed above. The lack of relationship between job fit and job satisfaction was perplexing because job fit and role fit are related constructs and both constructs were related to work engagement. Also, both job fit and job satisfaction are related to the job rather than staff members’ role and attachment to the role. Thus, one would have expected to find job fit related to job satisfaction.

In conclusion, the analysis of the factors that explain job satisfaction found that career support, recognition for competence, working conditions, external relations, and role fit all contribute to employees’ level of job satisfaction. For the most part, these findings were not surprising in that they were supported by the existing literature. These findings answered one of the five research questions included in this study. Together, these five questions provided information to better understand the work engagement and job satisfaction of university staff members. The theoretical and policy implications of these findings will be discussed below.

Implications for Theory

There are a number of theoretical implications that emerged in this study. First, this study found that work engagement and job satisfaction are distinct constructs that are related yet they do not explain one another. This was a surprising finding in terms of the
literature, which provided various other explanations of the distinctiveness of and relationships between these two constructs.

A second theoretical implication of this study is that job fit and role fit are distinct constructs, an idea that tied to Goffman’s (1961) role embracement theory yet was not the focus of work engagement literature (even though the overarching concepts of identity and fit were discussed). Furthermore, role fit and job fit had varying levels of importance in explaining work engagement and job satisfaction. Thus, this study lends support to the idea that these are unique constructs that influence the work lives of employees differently. Therefore, this study’s findings highlighted the need to distinguish between these two constructs when examining work engagement and job satisfaction.

A final theoretical implication was that role fit was important to job satisfaction. Role fit has not typically been considered in higher education job satisfaction studies. Rather, the emphasis has been on examining the relationships among specific factors in the work life and their relationship to job satisfaction. Staff member identity issues have not been emphasized in higher education job satisfaction research. Thus, from a theoretical perspective, this study provided support to the idea of incorporating job fit and role fit into job satisfaction studies.

Implications for Policy and Practice

In addition to this study’s implications for theory, there were also implications for policy and practice. First, work engagement and job satisfaction were found to be two distinct constructs that were explained by different factors. Thus, institutions seeking to address employee work engagement or job satisfaction can be aware of which issues influence work engagement and job satisfaction.
A second implication for policy and practice is that role fit was important to both work engagement and job satisfaction. Therefore, institutions could examine more closely the actions they are taking to align employees’ role identity with positions. For example, in the hiring process, additional information could be ascertained regarding how employees see themselves in relation to the position. For current staff members, employees could be encouraged to reflect on their role fit and to find aspects of their positions that affirm their role identity. In addition, positions could be adapted to reflect the role identity of the position holder. Aligning current staff members’ role identity with positions would acknowledge that both employees and positions change over time yet role fit remains important.

Finally, this study found that spending more time with students was related to higher work engagement. Therefore, institutions could consider building additional student interaction opportunities into current positions. For example, employees might rotate duties to allow for additional student contact. Additionally, employees could be encouraged and supported in their interactions with students that are outside of their job duties, such as attending student events and advising student organizations. On another note, this finding could be important for institutions to communicate to external constituents because it lends additional support to the idea that students are important to higher education employees.

Limitations of the Study

The results of the study, discussed above, suggest a number of relationships among higher education staff members’ demographic and profile characteristics, work
life perceptions, identity issues, work engagement and job satisfaction. Yet, these results must be considered within the limitations of this study.

First, this study is a single-institution study; the survey population was limited to staff members working within two organizational units at the institution. In addition, the number of responses received was relatively small (i.e., 170 usable surveys). Therefore, one must be cautious in generalizing the findings to other institutions and work units. Institutions have unique internal and external environments that influence employees’ perceptions of their work life. Therefore, contextualizing work engagement and job satisfaction studies is important.

In addition, it is unknown whether there was a self-selection bias in the survey responses. While the response rate was satisfactory (58%) and the number of survey respondents was similar to the survey population in terms of gender, unit, and administrative level, it is not known whether racial/ethnic groups are adequately represented in the responses. Moreover, it is not known whether employees who did not respond to the survey had significantly different views than those who completed the instrument. Finally, it is unknown whether the employer’s endorsement of the study influenced the number of responses received or skewed the responses provided.

In addition to the possibility of skewed responses due to the institution’s endorsement, there are risks that survey respondents did not understand the questions as anticipated and that the survey questions were presented in such a way that “inaccurate or uninterpretable answers” are given to survey items, and that the non-respondents differed significantly from the respondents (Dillman, 2007, p. 11). While this limitation exists in all survey research, it is nevertheless important to consider when examining the findings.
Finally, the methodology used in the study is another limitation. This survey was a one-time survey and thus the responses represent a “snap shot” of the employees’ perceptions to the issues included in the study. Because it is not a longitudinal study, it is not known whether employees’ perceptions change over time.

Recommendations for Future Research

This study brought to light additional research questions to be explored in future studies. First, researchers could continue to incorporate the variables of work engagement and job satisfaction into employee work life studies. As shown in this research, these two constructs are distinct and are related to different work life and identity perceptions. Additional research is needed with larger groups of employees in different institutional settings to determine if this finding holds true in other environments and with more robust statistical methods.

Second, researchers may wish to incorporate job fit and role fit constructs into higher education staff member job satisfaction research. While job satisfaction research has incorporated social support variables (i.e., questions regarding relationship), previous literature has not specifically incorporated the identity constructs of job fit and role fit. Incorporating additional identity constructs into studies could be fruitful.

Finally, additional research is needed to further examine the nuances in work engagement and job satisfaction. This research could, for example, consider various job tasks and assess their relationships to work engagement and job satisfaction. It may be that certain tasks are more engaging and satisfying for some employees and thus work engagement and job satisfaction levels might vary, for example, during the course of the academic year. Likewise, additional research could determine whether the engagement –
satisfaction matrix proposed by Gostick and Elton (2007) should be expanded to incorporate additional dimensions. It seems likely that issues and levels of job satisfaction and work engagement are more complex than can be depicted in a four quadrant matrix.

Conclusions

Colleges and universities are facing internal and external challenges that are resulting in increased numbers of staff members with new roles and responsibilities (Scott, 1978; U.S. Department of Education, 2008). In addition, there is increased public concern about higher education institutions resulting in “strained budgets … which have an impact on salaries and working conditions” (Johnsrud, 2002, p. 380). Thus, institutions have sought ways to foster work engagement and job satisfaction in employees so that institutions can continue to offer a quality education within the current political and fiscal landscape.

This study provided information both to institutions and their employees about the factors that influence work engagement and job satisfaction. At the same time, this study offered information to researchers studying job satisfaction and work engagement within higher education and in other industries. Finally, the study reinforced the idea that work means more to employees than just completing tasks; it is linked to their individual identities.
APPENDIX A

Survey Cover Letter

You are invited to participate in a survey about issues in your work life. Your human resources office e-mailed you about this survey a few days ago. The research project is looking into the relationships among employee work life perceptions, identity, work engagement, and job satisfaction. Below is a link to an online survey.

[link]

If you would prefer to complete a paper version of the survey, please e-mail me at HermsenJM@missouri.edu. In your e-mail, please indicate how you would prefer to receive the paper version of the survey (i.e., U.S. mail or a printable version of the survey via e-mail).

If you have any questions or would like more information, please review the more detailed instructions included with the survey. You may also contact me directly at HermsenJM@missouri.edu.

Thank you in advance for your participation.

Regards,

Jill Hermsen
Principal Investigator
APPENDIX B

Survey Instrument

Work Life Perceptions Survey

You are invited to participate in a research project. The research project is looking into the relationships among employee work perceptions, identity, engagement, and satisfaction.

I hope you will participate in this study. Your responses will help your university and other institutions improve the working environment for employees. The survey will take approximately 10 minutes to complete. There are no physical risks or discomforts associated with taking this survey.

Your participation is completely voluntary. You may refuse to participate or discontinue participation at any time without penalty. If you do not wish to take the survey, exit this screen. Your participation will not affect your relationship with the university. You may choose to answer all of the questions or skip some of the questions.

Your responses to the questions will be kept confidential.

Your name and computer identification information will not be collected. All data collected for the study will be stored in a secure location for three years by the principal investigator. The results of the study will not individually identify any survey participant. Results will be reported in broad patterns only to both the university and the higher education research community.

If you have questions or concerns about the study, contact Jill Hermsen, Principal Investigator, at 573-882-8232, HermsenJM@missouri.edu. You may also contact Dr. Vicki J. Rosser, Dissertation Advisor, at vicki.rosser@unlv.edu. This study was approved by the Institutional Review Board at this university and at the University of Missouri-Columbia. Any questions or concerns about human subject participation may be directed to University of Missouri-Columbia’s Campus Institutional Review Board, at 573-882-9585, umcresearchcirb@missouri.edu.

Thank you for your time in this research project.
## Work Life Perceptions Survey

Please read each statement carefully and indicate the extent to which you agree or disagree. Your responses to the questions will be kept confidential.

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<tbody>
<tr>
<td></td>
<td>Strongly Disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
</tr>
<tr>
<td>1.</td>
<td>I am given support for training or professional activities.</td>
<td>SD</td>
<td>D</td>
<td>N</td>
</tr>
<tr>
<td>2.</td>
<td>I have opportunities to develop further skills in my career.</td>
<td>SD</td>
<td>D</td>
<td>N</td>
</tr>
<tr>
<td>3.</td>
<td>I am encouraged to develop new skills.</td>
<td>SD</td>
<td>D</td>
<td>N</td>
</tr>
<tr>
<td>4.</td>
<td>The hiring practices in my unit are fair.</td>
<td>SD</td>
<td>D</td>
<td>N</td>
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<tr>
<td>5.</td>
<td>There are clear performance criteria outlined for my job.</td>
<td>SD</td>
<td>D</td>
<td>N</td>
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<tr>
<td>6.</td>
<td>I receive helpful feedback on my performance.</td>
<td>SD</td>
<td>D</td>
<td>N</td>
</tr>
<tr>
<td>7.</td>
<td>I contact my peers at other institutions when I need help with job-related issues.</td>
<td>SD</td>
<td>D</td>
<td>N</td>
</tr>
<tr>
<td>8.</td>
<td>My peers at other institutions contact me for my opinion on job-related issues.</td>
<td>SD</td>
<td>D</td>
<td>N</td>
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<tr>
<td>9.</td>
<td>I receive career advice from my peers at other institutions.</td>
<td>SD</td>
<td>D</td>
<td>N</td>
</tr>
<tr>
<td>10.</td>
<td>I receive helpful job-related information from professional associations and/or organizations.</td>
<td>SD</td>
<td>D</td>
<td>N</td>
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<tr>
<td>11.</td>
<td>I am given recognition for my contributions.</td>
<td>SD</td>
<td>D</td>
<td>N</td>
</tr>
<tr>
<td>12.</td>
<td>There is sufficient guidance from my supervisor.</td>
<td>SD</td>
<td>D</td>
<td>N</td>
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<tr>
<td>13.</td>
<td>I feel a high degree of trust from my supervisor.</td>
<td>SD</td>
<td>D</td>
<td>N</td>
</tr>
<tr>
<td>14.</td>
<td>I have the authority to make decisions.</td>
<td>SD</td>
<td>D</td>
<td>N</td>
</tr>
<tr>
<td>15.</td>
<td>My unit receives adequate resources.</td>
<td>SD</td>
<td>D</td>
<td>N</td>
</tr>
<tr>
<td>16.</td>
<td>The reputation of my institution is an asset to me.</td>
<td>SD</td>
<td>D</td>
<td>N</td>
</tr>
<tr>
<td>17.</td>
<td>I am satisfied with my salary.</td>
<td>SD</td>
<td>D</td>
<td>N</td>
</tr>
<tr>
<td>18.</td>
<td>My physical work environment is pleasant.</td>
<td>SD</td>
<td>D</td>
<td>N</td>
</tr>
<tr>
<td>19.</td>
<td>Benefit plans meet my expectations.</td>
<td>SD</td>
<td>D</td>
<td>N</td>
</tr>
<tr>
<td>20.</td>
<td>I have good relationships with colleagues in my unit.</td>
<td>SD</td>
<td>D</td>
<td>N</td>
</tr>
<tr>
<td>21.</td>
<td>There is a strong sense of teamwork in my unit.</td>
<td>SD</td>
<td>D</td>
<td>N</td>
</tr>
<tr>
<td>22.</td>
<td>My supervisor keeps me informed about department issues.</td>
<td>SD</td>
<td>D</td>
<td>N</td>
</tr>
<tr>
<td>23.</td>
<td>I have good cross-unit relations.</td>
<td>SD</td>
<td>D</td>
<td>N</td>
</tr>
<tr>
<td>24.</td>
<td>There is good communication between sub-units (e.g., teams, programs, etc.).</td>
<td>SD</td>
<td>D</td>
<td>N</td>
</tr>
<tr>
<td>25.</td>
<td>There is high turnover in my unit.</td>
<td>SD</td>
<td>D</td>
<td>N</td>
</tr>
<tr>
<td>26.</td>
<td>There is strong leadership in my unit.</td>
<td>SD</td>
<td>D</td>
<td>N</td>
</tr>
<tr>
<td>27.</td>
<td>I have a best friend at work.</td>
<td>SD</td>
<td>D</td>
<td>N</td>
</tr>
<tr>
<td>28.</td>
<td>I have a positive relationship with faculty.</td>
<td>SD</td>
<td>D</td>
<td>N</td>
</tr>
<tr>
<td>29.</td>
<td>I have a positive relationship with staff.</td>
<td>SD</td>
<td>D</td>
<td>N</td>
</tr>
</tbody>
</table>
30. My relationship with students is positive.  SD D N A SA
31. I have a positive relationship with the public beyond the university.  SD D N A SA
32. My work utilizes my full abilities.  SD D N A SA
33. I feel competent and fully able to handle my job.  SD D N A SA
34. My job gives me a chance to do the things I feel I do best.  SD D N A SA
35. My job and I are well matched.  SD D N A SA
36. I feel I have sufficient preparation for the job I now hold.  SD D N A SA
37. I like the identity my job gives me.  SD D N A SA
38. My job “fits” how I see myself.  SD D N A SA
39. The work I do on this job helps me satisfy who I am.  SD D N A SA
40. My job “fits” how I see myself in the future.  SD D N A SA
41. My immediate supervisor goes out of his/her way to do things to make my job easier.  SD D N A SA
42. Other people at work go out of their way to do things to make my job easier.  SD D N A SA
43. It is easy to talk with my immediate supervisor.  SD D N A SA
44. It is easy to talk with other people at work  SD D N A SA
45. My immediate supervisor can be relied on when things get tough at work.  SD D N A SA
46. Other people at work can be relied on when things get tough at work.  SD D N A SA

Please read each statement carefully and indicate your level of satisfaction with respect to your job on campus.

**Satisfaction**

<table>
<thead>
<tr>
<th>Statement</th>
<th>Extremely Dissatisfied</th>
<th>Very Dissatisfied</th>
<th>Neutral</th>
<th>Satisfied</th>
<th>Very Satisfied</th>
<th>Extremely Satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>47. There is sufficient variety in my job.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>48. I enjoy working in my position.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>49. I have input in deciding matters that affect my work.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50. I have a great deal of freedom on the job.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>51. I have the trust and confidence of my colleagues.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>52. I am satisfied with the work and responsibilities I have.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>53. Compared to my peers of similar experience and skills, my salary compensation is fair.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>54. I am satisfied with my job on campus.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Please read each statement carefully and decide if you ever feel this way about your job. If you have never had this feeling, mark “0” (zero). If you have had this feeling, indicate how often you feel it.

**Engagement**

<table>
<thead>
<tr>
<th>Statement</th>
<th>Never</th>
<th>A few times a year</th>
<th>Once a month or less</th>
<th>A few times a month</th>
<th>Once a week</th>
<th>A few times a week</th>
<th>Every day</th>
</tr>
</thead>
<tbody>
<tr>
<td>55. At my work, I feel very energetic.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>56. I can continue working for very long periods of time.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>57. I am enthusiastic about my job.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>58. My job inspires me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>59. When I get up in the morning, I feel like going to work.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>60. I feel happy when I am working intensely.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>61. I am proud of the work that I do.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>62. I am immersed in my work.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>63. Time flies when I am working.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

Please feel free to provide additional comments in the space below.

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Are you employed in a benefits eligible position (i.e., 30 – 40 hours per week)?
☐ Yes ☐ No

Are you primarily a faculty member? ☐ Yes ☐ No

What is your gender? ☐ Female ☐ Male

How would you describe your racial and/or ethnic identity? (please specify)
__________

In what year were you born? 19_______

Were you born in the US? ☐ Yes ☐ No
What is the highest degree you possess?

- High school
- Bachelor’s
- Master’s
- Professional degree (e.g., JD, MD)
- Doctorate
- Other: _______________

In which unit do you work?

- Student Affairs
- College of Education
- College of Nursing
- Other: ____________

What is your current position title (e.g., clinical professor, administrative associate, coordinator, assistant professor)? __________________

What percentage of your time is spent interacting with students?

- 0 – 25%
- 26 – 50%
- 51 – 75%
- 76 – 100%

What is your pay range?

- $0 - 25,000
- $25,001 - 50,000
- $50,001 - 75,000
- $75,001 - 100,000
- $100,001 - more

In your immediate work unit, are you a minority by gender? □ Yes □ No

In your immediate work unit, are you a minority by race and/or ethnicity? □ Yes □ No

How long have you been in your current job? ___________years

How long have you been employed on this campus? ___________years

Have you worked in a professional position at any other college or university? □ Yes □ No

If yes, how long were you employed at another college or university? ___________years

Thank you for your participation.
APPENDIX C

Survey Reminder Notice

I am writing to remind you of a survey link that was e-mailed to you one week ago. The confidential survey is seeking your input about your work life experiences.

If you have already completed the survey, please disregard this reminder. Thank you for your prompt response.

If you have not completed the survey, please consider taking 10 minutes to complete it now. Your input is needed to make this research accurately reflect issues pertaining to work life experiences at your university.

[insert link]

If you would prefer to complete a paper version of the survey, please contact me at HermsenJM@missouri.edu and I will send a survey to you.

Thank you for taking about 10 minutes to participate in this research project. Your response is greatly appreciated.

Sincerely,

Jill Hermsen
Principal Investigator
I recently e-mailed a link to a survey to you. The survey is about work life issues at your university. The study will help the university improve work life experiences, work engagement, and job satisfaction. I hope you have completed or will complete the survey.

I am writing to you to provide a final reminder about the survey. In order for the research results to be representative of the survey population, a response from each employee in the survey population is important. I would also like to remind you that your response is entirely confidential. No individual names will be associated with the research report and all research findings will only include aggregate data. The survey should take no longer than 10 minutes to complete. Below is a link to the survey.

[insert link]

If you would prefer to complete a paper version of the survey, please contact me at HermsenJM@missouri.edu and I will send one to you.

I appreciate your participation in this research project. Thank you for your time.

Sincerely,

Jill Hermsen
Principal Investigator
### APPENDIX E


<table>
<thead>
<tr>
<th>Survey item and construct</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>Alpha &amp; Factor Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Career Support</strong></td>
<td>3.74</td>
<td>0.83</td>
<td>.87</td>
</tr>
<tr>
<td>I am given support for training or professional activities.</td>
<td>3.94</td>
<td>0.97</td>
<td>.79</td>
</tr>
<tr>
<td>I have opportunities to develop further skills in my career.</td>
<td>3.86</td>
<td>1.00</td>
<td>.84</td>
</tr>
<tr>
<td>I am encouraged to develop new skills.</td>
<td>3.86</td>
<td>0.99</td>
<td>.86</td>
</tr>
<tr>
<td>The hiring practices in my unit are fair.</td>
<td>3.80</td>
<td>1.10</td>
<td>.66</td>
</tr>
<tr>
<td>There are clear performance criteria outlined for my job.</td>
<td>3.41</td>
<td>1.12</td>
<td>.79</td>
</tr>
<tr>
<td>I receive helpful feedback on my performance.</td>
<td>3.55</td>
<td>1.13</td>
<td>.78</td>
</tr>
<tr>
<td><strong>Inter-institutional Networks</strong></td>
<td>3.18</td>
<td>1.10</td>
<td>.89</td>
</tr>
<tr>
<td>I contact my peers at other institutions when I need help with job-related issues.</td>
<td>3.33</td>
<td>1.31</td>
<td>.90</td>
</tr>
<tr>
<td>My peers at other institutions contact me for my opinion on job-related issues.</td>
<td>3.16</td>
<td>1.33</td>
<td>.92</td>
</tr>
<tr>
<td>I receive career advice from my peers at other institutions.</td>
<td>2.83</td>
<td>1.19</td>
<td>.86</td>
</tr>
<tr>
<td>I receive helpful job-related information from professional associations and/or organizations.</td>
<td>3.42</td>
<td>1.26</td>
<td>.76</td>
</tr>
<tr>
<td><strong>Recognition for Competence</strong></td>
<td>3.73</td>
<td>0.89</td>
<td>.81</td>
</tr>
<tr>
<td>I am given recognition for my contributions.</td>
<td>3.59</td>
<td>1.03</td>
<td>.77</td>
</tr>
<tr>
<td>There is sufficient guidance from my supervisor.</td>
<td>3.60</td>
<td>1.19</td>
<td>.85</td>
</tr>
<tr>
<td>I feel a high degree of trust from my supervisor.</td>
<td>3.91</td>
<td>1.16</td>
<td>.84</td>
</tr>
<tr>
<td>I have the authority to make decisions.</td>
<td>3.83</td>
<td>1.08</td>
<td>.73</td>
</tr>
<tr>
<td><strong>Working Conditions</strong></td>
<td>3.27</td>
<td>0.77</td>
<td>.72</td>
</tr>
<tr>
<td>My unit receives adequate resources.</td>
<td>3.13</td>
<td>1.09</td>
<td>.73</td>
</tr>
<tr>
<td>The reputation of my institution is an asset to me.</td>
<td>3.78</td>
<td>0.98</td>
<td>.69</td>
</tr>
<tr>
<td>I am satisfied with my salary.</td>
<td>2.70</td>
<td>1.26</td>
<td>.65</td>
</tr>
<tr>
<td>My physical work environment is pleasant.</td>
<td>3.54</td>
<td>1.20</td>
<td>.68</td>
</tr>
<tr>
<td>Benefit plans meet my expectations.</td>
<td>3.17</td>
<td>1.12</td>
<td>.67</td>
</tr>
<tr>
<td><strong>Work Unit Relationships</strong></td>
<td>Score</td>
<td>Scale</td>
<td>Reliability</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>-------</td>
<td>-------</td>
<td>-------------</td>
</tr>
<tr>
<td>I have good relationships with colleagues in my unit.</td>
<td>4.26</td>
<td>0.78</td>
<td>.70</td>
</tr>
<tr>
<td>There is a strong sense of teamwork in my unit.</td>
<td>3.88</td>
<td>0.99</td>
<td>.80</td>
</tr>
<tr>
<td>My supervisor keeps me informed about department issues.</td>
<td>3.81</td>
<td>1.08</td>
<td>.81</td>
</tr>
<tr>
<td>I have good cross-unit relations.</td>
<td>3.78</td>
<td>0.89</td>
<td>.635</td>
</tr>
<tr>
<td>There is good communication between sub-units (e.g., teams, programs, etc.).</td>
<td>3.47</td>
<td>0.99</td>
<td>.81</td>
</tr>
<tr>
<td>There is high turnover in my unit.</td>
<td>3.20</td>
<td>1.19</td>
<td>*</td>
</tr>
<tr>
<td>There is strong leadership in my unit.</td>
<td>3.62</td>
<td>1.06</td>
<td>.81</td>
</tr>
<tr>
<td>I have a best friend at work.</td>
<td>3.12</td>
<td>1.11</td>
<td>*</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>External Relations</strong></th>
<th>Score</th>
<th>Scale</th>
<th>Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have a positive relationship with faculty.</td>
<td>3.70</td>
<td>0.89</td>
<td>.78</td>
</tr>
<tr>
<td>I have a positive relationship with staff.</td>
<td>4.16</td>
<td>0.71</td>
<td>.81</td>
</tr>
<tr>
<td>My relationship with students is positive.</td>
<td>4.27</td>
<td>0.74</td>
<td>.81</td>
</tr>
<tr>
<td>I have a positive relationship with the public beyond the university.</td>
<td>4.14</td>
<td>0.73</td>
<td>.67</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Job Fit</strong></th>
<th>Score</th>
<th>Scale</th>
<th>Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>My work utilizes my full abilities.</td>
<td>3.17</td>
<td>1.16</td>
<td>.74</td>
</tr>
<tr>
<td>I feel competent and fully able to handle my job.</td>
<td>4.24</td>
<td>0.87</td>
<td>.60</td>
</tr>
<tr>
<td>My job gives me a chance to do the things I feel I do best.</td>
<td>3.67</td>
<td>1.05</td>
<td>.83</td>
</tr>
<tr>
<td>My job and I are well matched.</td>
<td>3.78</td>
<td>1.03</td>
<td>.88</td>
</tr>
<tr>
<td>I feel I have sufficient preparation for the job I now hold.</td>
<td>4.02</td>
<td>0.94</td>
<td>.66</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Role Fit</strong></th>
<th>Score</th>
<th>Scale</th>
<th>Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>I like the identity my job gives me.</td>
<td>3.74</td>
<td>0.97</td>
<td>.88</td>
</tr>
<tr>
<td>My job “fits” how I see myself.</td>
<td>3.47</td>
<td>1.19</td>
<td>.95</td>
</tr>
<tr>
<td>The work I do on this job helps me satisfy who I am.</td>
<td>3.46</td>
<td>1.16</td>
<td>.94</td>
</tr>
<tr>
<td>My job “fits” how I see myself in the future.</td>
<td>3.12</td>
<td>1.22</td>
<td>.90</td>
</tr>
<tr>
<td>Social Support</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>----------------</td>
<td>---</td>
<td>---</td>
<td>-----</td>
</tr>
<tr>
<td>My immediate supervisor goes out of his/her way to do things to make my job easier.</td>
<td>3.51</td>
<td>1.12</td>
<td>.80</td>
</tr>
<tr>
<td>Other people at work go out of their way to do things to make my job easier.</td>
<td>3.34</td>
<td>0.99</td>
<td>.72</td>
</tr>
<tr>
<td>It is easy to talk with my immediate supervisor.</td>
<td>4.00</td>
<td>1.10</td>
<td>.81</td>
</tr>
<tr>
<td>It is easy to talk with other people at work</td>
<td>4.14</td>
<td>0.79</td>
<td>.64</td>
</tr>
<tr>
<td>My immediate supervisor can be relied on when things get tough at work.</td>
<td>3.96</td>
<td>1.05</td>
<td>.79</td>
</tr>
<tr>
<td>Other people at work can be relied on when things get tough at work.</td>
<td>3.86</td>
<td>0.87</td>
<td>.60</td>
</tr>
</tbody>
</table>

* = Dropped from the construct due to low factor loading.
### Differences by Demographic and Profile Characteristics: T-test and ANOVA Data

<table>
<thead>
<tr>
<th>Demographic or Profile Characteristic</th>
<th>Construct</th>
<th>Group</th>
<th>Mean</th>
<th>SD</th>
<th>Test Statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>Job Fit</td>
<td>21-30</td>
<td>3.69</td>
<td>0.71</td>
<td>$F(3, 150) = 3.51, p &lt; .05$</td>
</tr>
<tr>
<td></td>
<td></td>
<td>31-40</td>
<td>3.91</td>
<td>0.67</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>41-50</td>
<td>3.57</td>
<td>0.83</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>51+</td>
<td>4.13</td>
<td>0.60</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>Working Conditions</td>
<td>21-30</td>
<td>3.32</td>
<td>0.67</td>
<td>$F(3, 149) = 3.35, p &lt; .05$</td>
</tr>
<tr>
<td></td>
<td></td>
<td>31-40</td>
<td>3.34</td>
<td>0.74</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>41-50</td>
<td>3.02</td>
<td>0.76</td>
<td></td>
</tr>
<tr>
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\(^*\) = Was significant using Levene’s test for homogeneity of variances.
REFERENCES


the annual meeting of the Association for the Study of Higher Education, San Antonio, TX.


Jill Marie Hermsen was raised in Dyersville, Iowa. She earned a Bachelor of Arts degree in sociology from Briar Cliff College in 1992 and a Master of Education degree from Harvard University in 1996, where her concentration was in higher education administration, planning, and social policy. Her research draws upon her educational background as well as hands-on knowledge and experience gained while working in private and public sector organizations, including positions as a staff member in a research university.