

The Pennsylvania State University
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**RELATIONSHIPS AMONG PERCEIVED ORGANIZATIONAL SUPPORT,
JOB TRAINING SATISFACTION, AND JOB SATISFACTION WITHIN STAFF
PERSONNEL AT PENN STATE UNIVERSITY, UNIVERSITY PARK**

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ABSTRACT

The purpose of this study was to discover what relationships, if any, existed between job satisfaction, job training satisfaction, and perceived organizational support—the variables of interest. There is additional attention in the relationships that may exist between the variables of interest and control variables such as occupational status, participant age, participant's educational attainment, and gender of full-time staff employees working at Penn State University at University Park. If there are relationships between the variables, what are those relationships, and how are they affected by the control variables? Of particular interest was occupational status of the participant and their level within the organization.

A survey was sent to all full-time staff personnel at Penn State University at University Park. Those employees included all, except students, faculty, and volunteers. The survey instrument included basic demographic questions to qualify the participant as eligible for the survey, and to collect the data needed for the control variables. Those who participated were asked to complete 25 Likert scale questions relating to the variables of interest. There were 12 questions capturing employee perception of job satisfaction, seven for job training satisfaction, and six for perceived organizational support.

Collected responses were reviewed for validity determined by the amount of missing data, the employee demographic eligibility, and if the employee authorized the use of their aggregate data in this study. A total of 2,103 surveys were deemed valid. Analysis of valid surveys indicated strong and statistically significant positive relationships between job training satisfaction, job satisfaction, and perceived organizational support. The control variables did not offer any conclusive statistical findings with the exception of a positive relationship found between perceived organizational support and both job training satisfaction and job satisfaction, controlled by occupational status, specifically technical service employees.

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Chapter 1

Introduction

Organizational structure for the staff workforce at Penn State University is not unlike the structure used by most higher education institutions¹. The general structure is hierarchal, with a top-down flow of power with department specific personnel designations. These designations are used by Penn State and mirror the same or similar stratifications and nomenclature as other large universities. As with other institutions, much attention is paid to faculty and students as researchers map their experiences, perceptions, and journeys in higher education. The most overlooked personnel in higher education are the staff and technical service employees who managed the business of running a university.

Staff employees, which are illustrated in the stratifications and job level naming conventions by Knapp, Kelly-Reid, and Ginder (2012), outlined their report on salaries and positions within higher education, confirms there is a clear hierarchy of administration, staff, and technical personnel which is used as higher education standard, mirrored across institutions in the U.S. Faculty personnel follows similar human resource practices, but differ greatly in how they are evaluated, rewarded, and attain upward mobility. For the purposes of this study, only staff and technical service personnel are included in the research, survey, evaluation, results, and discussion. Faculty (and faculty related positions) have different practices for training, evaluation, processes for rewards, and metrics in which to measure job satisfaction.

¹ Comparable schools to gauge standards reviewed in this study can be seen in the Big Ten Schools in which Penn State is a member. Big Ten Schools include: University of Michigan, Northwestern University, Wisconsin University, University of Illinois at Urbana-Champaign, Ohio State University, Michigan State University, Purdue University, University of Minnesota, Indiana University, and the University of Iowa. Using these schools as a reference, each was contacted or researched to confirm common practices asserted in this study.

The staff at Penn State University are served by an overall Human Resource Management system which hires, promotes, and provides access to training opportunities. Each staff and technical service employee is ideally served by the University with access to information regarding their positions, their management structure, open positions, training resources, evaluations from management, and opportunities to advance. Training can be university-wide, while some individual or unit training is provided or sponsored by the department level.

Large higher education institutions like the Big Ten Schools sponsor employer-provided training and often include a staff training department. McDonald and Hite's (2005) article aimed at the revival of career development in human resources, noted the traditional definition of career development is to create a stable, well-performing workforce with a predictable progression through the hierarchy.

The in-house training and development department at Penn State University is Workplace Learning & Performance (WLP). WLP describes their mission as, "We provide the highest quality professional development opportunities for Penn State faculty and staff" (Workplace Learning & Performance, 2013). WLP's mission statement embraces this standard of commitment to training for all personnel. Examples of training include, but are not limited to: training on PSU processes, leadership development, diversity, teamwork, and conflict resolution. WLP also provides certificate programs, predominantly offered to those in supervision to enhance leadership development, but also encourages development within current roles, such as Administrative Assistance. Through WLP, employees can also access a myriad of online training, the majority of which is through a partnership with SkillPath, covering topics like project management, communication, clerical duties, and accounting. WLP also offers customized training programs to be developed by the request, as well as online compliance training (Workplace Learning & Performance, 2017). In accordance with WLP's mission statement, training is offered to every stratum within the staff hierarchy at Penn State University.

As this study will discuss, the definition of equity has evolved over the years, before and after Adams' (1963) equity theory was introduced. Rewards—including access to resources—based on input and output, in relation to age, ethnicity, gender, physical abilities/qualities, race, and sexual orientation have been used to some extent in the workforce over the last century. Some of these input definitions are now recognized as primary dimensions of diversity, as described by Jonsen, Tatli, Ozbilgin, and Bell (2013) in their research of conflict and social tragedy and include age, ethnicity, gender, physical abilities/qualities, race and sexual orientation, and are often studied in contemporary workforce research, as well as research of students and faculty in higher education.

Unlike primary dimensions, secondary dimensions of diversity defined recently in the World Economic Forum (2017) and examined by Schmidt (2009), in his research of the relationship between the dimensions of diversity and job training satisfaction, where he explored the status of being employed, employed full time, and the occupational status of the employee within an organization. Through a review of the literature, occupational status is less researched as it pertains to training equity—the allocation and access to training opportunities in the workforce. Occupational status is, however, a well-researched topic by sociologists (and other social sciences) as it has been, and continues to evolve, as a primary point of measurement related to one's socioeconomic status. Occupational status, as defined by the U.S Bureau of Labor and Statistics, and included as a factor within the secondary dimensions of diversity, refers to an employee's hierarchal status within the organization, synonymous with job status or organizational status.

Privilege and opportunity in the workplace can increase or decrease based on primary and secondary dimensions of diversity and lower the value of the individual (Pinto, 2011). Elman and O'Rand (2004) discuss the bleaker reality of those with poorer socioeconomic status and childhood disadvantages, with lessened opportunities to succeed in the attainment of

postsecondary education (as one indicator of success), thereby negating their human capital value, potential wages, and opportunities in the workplace.

Exploring the hierarchical control of training resources and the types of training delivered to employees by their rank of power, Schied, Carter, Preston, and Howell (1997) reviewed multiple organizations' training practices and how those practices affect management strategies as they relate to human resource development (HRD). Expressing fear of oppression through workplace learning, Schied et al. noted the types of training distributed to the ranks of the workforce vary not only by labor division, but also by the psychological objective the training was intended to achieve. For example, minimal training may be offered to low ranking personnel, and training may be devoted to increasing team performance, essentially promoting conformity and discouraging disagreements with management (Schied et al., 1997).

Potentially troubling is the moral authoritarianism which comes to light when tied again to the profitability of human capital. Moral authoritarianism deems some employees more desirable than others—with little regard to the current polarization of education or attainment based on socioeconomic status. The desirability of the employee is linked to an achieved status of education, resulting rank within the hierarchy, and potential of the employee. Thus, deeming one group more worthy of development than others (McPherson & Wang, 2014).

The equity of distributed training resources is not easily measured, and often relies on the perception of the employee, the perception of management, the indicated sharing of resources of the organization, and the communication of those resources to management, supervisors, and employees. To that end, job satisfaction when related to job training satisfaction becomes a challenging factor to investigate. Locke (1969), considered to be the subject expert and one of the founders of job satisfaction research, linked overall job satisfaction to a person's values, desires, and expectations (p. 320). In his work, Locke spent years refining the scope in which a researcher would measure job satisfaction. Locke built on his own work over the years, and

exhausted all other relating research, to create the preliminary definition of job satisfaction as “a function of the perceived relationship between what one wants from one's job and what one *perceives* [emphasis added] it as offering or entailing” (Locke, 1969, p. 316). To help define the parameters which affect the outcome of job satisfaction, Locke emphasized that satisfaction exists as a person’s perception, values, and judgment between the relationship of perceptions and values. The importance of measuring values is to gauge the significance of the person’s perceptions in relation to those values. It would behoove any researcher to question the satisfaction of an employee based on specific rewards without determining if the employee first finds value in those rewards. It is then the gap perceived by the employee between the value and variable, in turn, becomes the measurement (Locke, 1976).

Schmidt (2007) defined job training satisfaction as “the extent to which people like or dislike the set of planned activities organized to develop the knowledge, skills, and attitudes required to effectively perform a given task or job” in his article which reviewed the definitions of workplace training and job satisfaction, and explored the relationships between job training satisfaction and job satisfaction (p. 483). It is Schmidt who termed job training satisfaction, which is utilized as a key component of this study. Locke’s metrics, Schmidt’s research of job training satisfaction, and the perception of organizational support are the foundations of this study’s investigation of job training satisfaction at Penn State.

Perceived organizational support as defined by Kurtessis, Eisenberger, Ford, Buffardi, Stewart, and Adis, (2015) in their meta-analytic review of organizational support theory (OST), is when “employees develop a general perception concerning the extent to which the organization values their contributions and cares about their well-being” (p. 2). In Eisenberger, Huntington, Hutchison, and Sow’s (1986) identification of perceived organizational support, they clarified “support” to indicate such perceived support would use the same emotional contexts in which people attribute commitment through a social relationship (p. 501).

In researching the relationship between perceived training opportunities, motivation, and outcomes, Dysvik and Kuvaas (2008) found employees who perceived an interest in their careers and encouragement from their employers were far more likely to attend training, retain knowledge, utilize knowledge in the workplace, and show a higher degree of loyalty. Dysvik and Kuvaas also found intrinsic motivation prompted by the encouragement of the organization to attend training, was also tied to the outcomes of increased work performance and reduced employee turnover. In a later study of perceived organizational support, Kuvaas and Dysvik (2010) explored perceived investment in employee development, which they defined as “employees’ assessment of their organisation’s long-term and continuous commitment to helping employees ... obtain new skills and competencies” (p. 139). Kuvaas and Dysvik further explained the investments are development opportunities, built upon the definition of support as defined by perceived organizational support. In the same article, Kuvaas and Dysvik also made the important assertion that the support given by a supervisor and department is perceived as representative of the organization, creating a synonymous perception of the supervisor, department, and the organization².

The relevance of including job training satisfaction in this study is exemplified in the recent independent surveys conducted by leaders in the organizational development and workforce fields. In the 2017 survey conducted by ExecuSearch, which surveyed over 1,000 employed individuals in the U.S. responded at 76%, “professional development opportunities are one of the most important elements of company culture” (The ExecuSearch Group, 2017, p. 19). The ExecuSearch respondents indicated that in addition to training, their overall satisfaction is increased when they can expand and use their skills in projects supported by the organization.

² Department and supervisor are used in this study to gain employee’s perception of organizational support based on the research linking supervisors and department as representative of the organization or seen as synonymous to the organization as a whole (Dysvik & Kuvaas, 2012; Eisenberger et al., 1986).

Similarly, Udemy contracted with Toluna Group to conduct a survey in April 2017 of over 1,000 U.S. office workers in which “57% of workers ranked opportunities to learn and grow as one of the most important aspects of workplace culture” (Udemy, 2017). The Work Institute’s 2017 Retention Report conducted over 240,000 exit interviews of U.S. employees and found the desire for career development and opportunities for growth, achievement, and security was the first reason (in a list of 10 reasons) employees will leave their organization (The Work Institute, 2017, p. 16). The Work Institute’s report listed other preventable reasons for voluntarily leaving an organization but reiterated, “career development reasons have been on the rise in the past 3-7 years more than any other reason” (p. 18).

Schuck, Twyford, Reio, and Schuck (2014) in their research into the links between engagement and turnover, importantly pointed out “that not all learning and development opportunities within organizations are perceived equally across all levels and with all types of employees” (p. 240). It is anticipated, as part of this research, to capture these perceptions at Penn State University.

Purpose of Study

In studies across many different sources of literature (as reviewed in Chapter 2), job satisfaction and perceived organizational support are tied to many relevant antecedents, mediations, and outcomes of the global workforce. In recent years, the addition of job training satisfaction has been introduced as another force relating to those factors. Often associated with workforce outcomes like turnover intent, employee commitment, or engagement, and related to each other, but all three are seldom researched in the same study. In a university staff environment, they have never been researched.

The purpose of this study is to gain a better understanding of the relationships among job satisfaction, job training satisfaction, and perceived organizational support amid staff personnel at Penn State University. A potential possibility of this research is also to investigate whether Penn State is perceived to offer the same training opportunity resources to all staff personnel equitably. If requested, results of this study may provide a strategic platform in which Penn State University can either implement or improve training practices to provide equitable training opportunities, reinforce a culture of support for all employees, and determine if those practices may improve job satisfaction.

Research Questions

Quantitative research based on the self-reported results of a cross-sectional web-based and paper survey of full-time staff employees including executive, clerical, and technical service personnel at Penn State, University Park hopes to examine the following:

Research Question 1: Is there a relationship between job training satisfaction and perceived organizational support?

Research Question 2: Is there a relationship between job training satisfaction and job satisfaction?

Research Question 3: Is there a relationship between perceived organizational support and job satisfaction?

Research Question 4: Is there a relationship between perceived organizational support and job training satisfaction?

The variables of interest relating to the research questions are job training satisfaction, job satisfaction, and perceived organizational support. Additional relationships are reviewed for associations between the three variables of interest, and the control variables of occupational status, gender, age, race, and educational attainment.

Study Significance

According to Gray and Herr's (1998) review of the history of United States workforce development, employer-provided training is typically focused on those in leadership positions. McDonald and Hite (2005) in their article outlining the relevance of career development, also concluded, "most organizations have concentrated their career development efforts on their upper-echelon employees, primarily those individuals in professional and/or technical and managerial positions" (p.424).

In Asplund's (2004) literature review of employer-provided training, which focused on the dissemination of training and effects, she asserted employees who are perceived to have less formal education, low-skill, and a higher possibility of turnover, have less opportunity to receive training opportunities, creating a disparity between different employees and employee groups. In a study by Carnevale (1990), it was written only 20% of American workers received employer-paid training over the span of their entire careers. Carnevale further explained those employees who earn hourly wages have less training opportunities.

Acker (2006) tackled the issues of equality in her article on inequality regimes in the workplace. Defining those inequalities (loosely as the author notes) as "interrelated practices, processes, actions, and meanings that result in and maintain class, gender, and racial inequalities within particular organizations" (Acker, 2006, p. 443). In her review of past work and investigations of different organizations, Acker noted the power dynamic of hierarchal systems continues to propagate itself, by disseminating resources which favor those already in power.

The significance of this study is to determine the relationships between job training satisfaction, job satisfaction, and perceived organizational support at Penn State to potentially

discern if job training satisfaction, job satisfaction, and perceived organizational support are affected when controlled by occupational status, and if this reveals a trend in the perception of equal access to equitable training opportunities.

There is much research on diversity, inclusion, and equity for students in higher education (Ainsworth-Darnell & Downey, 1998; Cannon, 1990; Flores, 2016; Koeske & Koeske, 2016), but little exists which even peripherally connects equity and staff training, and none which focuses on the equity of staff training in higher education.

Research on occupational status and equitable training for staff personnel at Penn State has not been conducted, creating a deficit of information relating specifically to this institution. Likewise, this topic has not be explored with any staff at any institution of higher education. Furthermore, job training satisfaction, job satisfaction, and perceived organizational support in higher education for staff personnel has not been researched, while also controlling for occupational status.

Job training satisfaction, job satisfaction, and perceived organizational support in this study are comprehensive ways to discern if employees' perceive to have the opportunity to take advantage of training resources and if access, combined with organizational support, contributes to overall job satisfaction. Perceived training opportunities are evaluated based on job training satisfaction and perceived organizational support, then controlled for occupational status to determine if employees' perceptions are affected by status. This study will examine a population in which there is little research.

Chapter 2

Review of Related Literature

This section will outline the strategies used to conduct research related to the topics explored in this paper. It will outline the overarching themes, the sources used to gather peer-reviewed scholarly articles, and keywords used to gain supporting and peripheral information. To gain a greater understanding of the primary topics explored in this paper, several different tactics were utilized to gather research.

To examine the main themes of equity, job satisfaction, job training satisfaction, occupational status, and perceived organizational support, many peripheral topics required review and summation in order to map the concepts appropriately. Sources used to gather literature for review included multiple databases which included ProQuest, EBSCOhost, ABI/INFORM Collection, The CAT, and Education Research Complete. Google Scholar was employed to locate additional research sources which lead to peer-reviewed articles, books, and other dissertations. While dissertations were not directly used in this study, they were a great resource for finding related peer-reviewed articles. Journals specifically reviewed included (but were not limited to) Human Resource Development Quarterly, Industrial and Organizational Psychology, International Journal of Training and Development, Journal of Occupational and Organizational Psychology, Organization Development Journal, Performance Improvement Quarterly, Science Direct Publication: Research in Social Stratification and Mobility, and TD: Talent Development. Books discovered through reference investigation (articles with similar citations, articles referenced, and articles which cited) were located through the Penn State library stacks, Google Scholar excerpts, Google Play Books, or Amazon. Furthermore, authors who commonly wrote on a notable topic were researched extensively for similarly written articles, or articles which incorporated one or more topic of interest. Peer-reviewed articles were utilized to not only

discover related material, but to also find related articles as those referenced by the article in hand, or by those who referenced the article in hand.

Equity proved to be a difficult topic to research as the definition has evolved over the years. To capture the progressing definitions and the topics which influence equity, it proved useful to review information resulting from the following search criteria: perception of fairness, relative deprivation, distributive justice, organizational justice, social exchange, equity theory, civil rights, opportunity as a resource, and equality.

Job training satisfaction has less of a structural history, but has roots in job satisfaction. Job training satisfaction builds upon the research done around job satisfaction and contains many of the same components and research framework. To properly research the literature of both job training satisfaction and job satisfaction, it proved necessary to also review the overall definition of perception and perception as it relates to values and rewards. Furthermore, it was necessary to also search for articles with the keywords: commitment, motivation, self-efficacy, and turnover intention. As noted, peripheral facets applied to job satisfaction, but to further define job training satisfaction, search topics were refined with perceived training values (outcomes important to the trainee), rewards, and the reality which exists in between.

Occupational status has long had its roots in workforce development and the social sciences. It was important to review the literature on socioeconomic status, poverty, class schemes, social capital, social stratification, and mobility. As a second dimension of diversity, research on inclusion, marginalization, privilege, power, prestige, and social standing are also reviewed.

Perceived organizational support is another concept which has become a buzzworthy topic of the mid-1990's and then was expanded upon over recent years. Providing structural components and even tangential resources from which to build upon, it was again important to review how perception is defined, research organizational support theory, organizational justice,

job satisfaction rewards, perceived investment in employee development, and perceived supervisor support.

Equity, Equality, and Organizational Justice

What is equity? President Barack Obama spoke to equity and education during his second inaugural address, "we are true to our creed when a little girl born into the bleakest poverty knows that she has the same chance to succeed as anybody else" (The White House & Office of the Press Secretary, 2013). In 2016, the acting U.S. Secretary of Education John B. King, Jr. said, "We have a moral and a civil rights obligation to ensure that all students, with and without disabilities, are provided the tools they need to succeed, regardless of background" (U.S. Department of Education Press Office, 2016).

According to Adams' (1965) equity theory of inputs and outcomes, equity referred to the equal access to resources and the allocation of those resources to all persons. In its current definition as it relates to diversity, equity also stipulates those resources cannot be impeded by an ascribed status (gender, race, ethnicity, sexual orientation, ability, or family background), and implies giving as much advantage, opportunity, or consideration to one individual as it is given to another. Not to be confused with the concept of status leveling as reviewed by Pfeffer and Veiger (1999) which stresses the blurring of status within a hierarchy, Homans's (1962) theory of distributive justice (a just allocation of resources) and Adams' equity theory looked to change the way certain outcomes are applied to inputs. If all inputs (experience, skill, and effort) are equal without the inclusion of ascribed status, the outcomes (opportunities, capabilities, and resources) are equally applied, thus creating equity (Clapp & Sen, 1999; Dworkin, 2000; Rawls, 1971).

Equity, equality, and organizational justice are at the foundation of the relationships between job satisfaction, job training satisfaction, and perceived organizational support. Castilla

(2008) noted in his study of what he termed “performance-reward bias,” not all employees are treated the same. While meritocracy and performance related rewards are common organizational practices, individuals may experience a lack of equitable treatment based on their gender and/or race. Castilla explained the often biased-laden disparity in the performance-based reward system, in which, “organizations frequently implement formal and informal performance evaluations that, in the end, affect major employee career outcomes such as task assignments, training opportunities, salary increases, and promotions” (p. 1481).

To review workplace fairness, one aspect of treatment is the employee’s perceived satisfaction of outcomes—the reward output system utilized by the organization. To appreciate equity, equality, or organizational justice, the notion of fairness is first explored by historically recognizing the concepts and theories around fairness. The perception of the fairness also developed the concept of relative deprivation. The unfairness of treatment is perceived, relative deprivation is “the idea that people’s reactions to outcomes depend less on the absolute level of those outcomes than how they compare to the outcomes of others against whom people judge themselves” (Greenberg & Colquitt, 2005, p. 13). Relative deprivation is important in how it fits into the historical context of organizational justice, as well as how people perceive fair treatment, based on the treatment of their peers. The overall satisfaction of outcomes and rewards are directly related to the perception of fairness framed by social comparison.

Using relative deprivation as a platform from which to build, Homans (1961) moved forward with the concept of distributive justice. Distributive justice also utilizes concepts included in Homans’s (1958) social exchange in which the behavior of one person influences the activities of at least one other person. The importance of the social exchange is the experiential trends created. If a person completes a task and is rewarded, it creates a normative expectation. If another person completes the same task and the reward does not occur, that person might feel they have been treated unfairly—the precedent of the expected norm becomes a right (Rex &

Homans, 1962). Thus, the significance of distributive justice's social exchange is the creation of the expected rewards. More importantly, the social exchange engages the concept of fair and unfair treatment as well as creating a relationship (positive or negative) between those who expect the reward, and those which distribute that award. Distributive justice incorporates the perceived fairness of the social exchange, with the necessity of perception (relative deprivation) and how the rewards compare to the rewards given to others.

Equity in current terms has accounted for rights in which inputs of ascribed status should not be used in determining outcomes. Foladare (1969) in his study to clarify the difference between ascribed and achieved status, explained ascribed status as the status an individual is assigned at birth or assumed involuntarily. Ascribed status as inputs considered for rewards—relating to outcomes—are components contrary to today's standard of civil justice. The use of equity theory can then be tied intuitively with distributive justice as noted by Adams (1965) in his research for General Electric, in a review of social exchange theory and the literature associated with equity theory. Distributive justice thus far has described a fair and just type of treatment, but still integrates the distribution of a resource within its definitions of rewards. It is that resource in which justice must be applied; which can be described by opportunity, commodity, and rewards (Morand & Merriman, 2012).

Resources, as defined by Dworkin (2000) are those commodities which can be disseminated based on the owner's method of distribution, or their interpretation of equality. If the owner does not practice by an egalitarian system, the unfair distribution of commodities leads to an injustice, noting the value of those resources are determined by the perception of others as "envy," tying resources as a value recognized in relative deprivation (Dworkin, 2000, p. 83).

Morand and Merriman (2012) reviewed their "equality theory," in which they too are struck by the nebulous definition equity has taken over the years. They described equity as "the sense that the outcomes individuals receive (remuneration, a corner office, or any other valued

outcome) should be awarded in proportion to their inputs (how hard they work, how productive they are, etc.” (p. 133). However, they also explore the definitions of equality as referred to by the philosopher Kant (2005) in terms of human worth and dignity. Morand and Merriman further clarified the moral dimension of equality is intrinsic to equity as part of the overall distribution of resources and justice.

In summation, equity as a contemporary concept is the combination of relative deprivation, distribution justice, and equity theory as it has evolved to allow for the distinction that inputs should not include the individual’s ascribed status. The perception of fairness as compared to others, the societal determination of justice as a moral imperative, and the meritocracy of input and outcomes are integral to the definition as it is discussed in this paper.

The Hierarchical Organization

An organizational structure is the building block of any business entity. The structure as defined by Pugh’s (1984) review of organizational theories as the roles and responsibilities of individuals, to whom those individuals will report, the levels of management, and those who make decisions, all to accomplish a common goal.

A hierarchy is an organizational structure which is often denoted by a visual image of a pyramid. March and Heath (1996) described a hierarchal structure as a cascading authority of relations with those in power at the apex. As with the pyramid, there are far fewer people on top than there are on the bottom. Each stratum of the hierarchy has levels of power, and most, limits to resources based on social stratification and defined by occupational status. Adler (2001) captured best how knowledge is accessed in his review of the continued use of hierarchal systems in capitalism, “under hierarchy, knowledge is treated as a scarce resource and is therefore concentrated, along with the corresponding decision rights, in specialized functional units and at

higher levels of the organization” (p. 216). Those limits certainly apply to access of resources like opportunities for training.

Training as a resource in a hierarchal organization may be impeded by the attributes of power and status as delineated by the levels in which one resides—those within the higher strata will have greater access and opportunity to resources such as training. Acker (2006) took this one step further in her paper on inequality regimes and asserted the stratification of the hierarchy is created with a purpose to mirror the external social classes, as “hierarchical positions are congruent with class processes in the wider society” (p. 444), and with the intention of keeping those employees of lower social and socioeconomic classes within the lower strata of the organization.

Organizational Training

Carnevale (1990) in his report to the Department of Labor on the strategic role of training in the workplace, explained organizational training can be defined as the education an employee receives which develops skills and knowledge, and produces behaviors which can then be applied in the workplace. One intent of training an employee, Carnevale explains, is to transfer knowledge which will build upon previously learned knowledge, transform the previously learned knowledge, or impart new knowledge which will change or alter an employee’s understanding. Part of organizational training, professional development is a process in which a transfer of knowledge leads to a certain attainment of understanding which can be applied and improve current jobs, or prepare employees for upward mobility. Carnevale notes the definition of training can take on many different descriptions; he also emphasizes training can be found in varied formats.

Employer-provided training can take many forms. It may be available as formalized instruction in a classroom setting, designed and delivered lecture style by in-house training staff. It may be delivered via interactive video or through other computerized instruction systems. Employer-provided formalized training may mean that an employer has contracted with an outside training provider (consultant) to design, develop, and deliver training either on or off the employer's worksite. (p. 23)

According to Mumford (1996) in his book on effective learning, demonstrated learning is not only the acquisition of new knowledge, but also a change in perception gained by knowledge through insights. Thorpe and Clifford (2000) offered a definition of workplace learning as “the process of increasing knowledge and skills and developing our attitudes or beliefs so that we have the opportunity for increased choice” (p. 13).

Organizational training has traditionally been adopted to increase productivity, as noted by Barrett and O’Connell (2001) in their study of employer-provided training and productivity growth. According to Stolovitch and Maurice (1998) in their review of ROI and poorly selected training programs, the organization’s typical response to finding gaps in performance and subsequent miss-planned training events, offered the following appraisal of successful training:

Training, appropriately selected, can lead to astounding performance results. Training, well selected, designed, and supported, increases the ability of people to perform. It raises the value of the human capital an organization possesses and this benefits both organization and individual performer. (p. 16)

Organizations might view training as a tool to increase productivity, but those goals may not align with their service to their employees. Bierema (2002) reviewed the inclusivity of training in the workplace in relation to sociocultural contexts and concludes her review with an admonition, “organizations must provide training and development more equitably and assess who is attending the programs that lead to higher pay and promotion” (p. 75). Spencer (2002) in his article relating the tension between the pedagogics of work and learning keenly notes:

Most organizational education/training budgets are biased in favour of professional workers - fewer corporate dollars are spent on those workers with little or no formal education. What is expended at the bottom of the organizational structure is usually concentrated on immediate orientation/job training, compulsory health and safety training. (p. 302)

Schmidt (2009), in his evaluation of diversity and job training satisfaction, noted “training should be designed and delivered to meet the needs of all employees, and employees should perceive that they are being treated fairly and equitably with regard to the training they receive” (p. 298). Schmidt went further in his definition of diversity than Bierma’s description of marginalized groups, to include: “job tenure within the organization; level of formal education achieved; employee age; gender; ethnicity; employee status (temporary versus permanent); and job type” (p. 298). In his research, Schmidt also built off of Adams’ (1965) equity theory, but added the context of inputs and outcomes as they apply to occupational status.

Occupational Status

The purpose of a hierarchy is to clearly define roles and leadership throughout the organization. As research notes, there are positive and negative aspects of this structure. One such negative is the inherent ability to keep employees within their stratum, limiting access to training opportunities, and granting favor to those already in positions of power.

Occupational status is a term which can be defined as not only a secondary dimension of diversity, but also as a common measurement within economic research and social sciences. Research around topics of diversity, equity, inclusion, and organizational justice have all fallen into the realms of social sciences, which has universally recognized occupational status as a fundamental measure of social standing, reflecting the distribution of power and privilege associated with positions within a hierarchy, and is a key measure of socioeconomic status

(Croteau, Talbot, Lance, & Evans, 2002; DiTomaso, Post, & Parks-Yancy, 2007; Jonsen et al., 2013; Smith, 2002).

Hauser and Warren (1997) noted in their update and review of socioeconomic indexes for occupations, that occupational status has a history with the Bureau of Labor and Statistics (BLS), as well as the Bureau of the Census as exemplified in Table 1. Along with the release of the Census, the BLS updates the occupational classification systems, “which are revised each decade at the time of the decennial census or else on the Dictionary of Occupational Titles, which is produced by the Employment and Training Administration of the Department of Labor” (Hauser & Warren, 1997, p. 180).

Table 1. *Selected Census Bureau Occupational Groupings, 1880-2000*

Occupational Grouping by Year				
1880	1910	1950	1990	2000
Agriculture	Agriculture	Professional	Managerial & professional	Managerial & professional
Professional & personal service	Extraction of minerals	Farmers	Technical, sales, & administrative support	Service
Trade & transportation	Manufacturing & mechanical	Managers, officials, & proprietors	Service	Sales & Office
Manufacturing, mechanical, & mining	Transportation	Clerical	Farming, forestry, & fishing	Farming, forestry, & fishing
	Trade	Sales	Precision production, craft, & repair	Construction, extraction & maintenance
	Professional service	Craftsmen	Operators, fabricators, & laborers	Production, Transportation & material moving
	Domestic & personal service	Operatives	Military	Military
	Clerical occupations	Service		
		Farm laborers		
		Laborers		

Source: Adapted from “Harmonized Occupational and Industrial Coding” from the Integrated Public Use Microdata Series (IPUMS, 2017).

Early use by researchers of occupational status began with a survey of occupational prestige scales, namely the National Opinion Research Center (NORC) survey in 1947 developed by Cecil North and Paul Hatt, which was used to discern prestige on the basis of survey respondents' occupational standing and social standing, using 90 occupations in 1947 (Hodge, Siegel, & Rossi, 1964).

Results of these surveys, and the surveys themselves, have changed over the years—using different methodology, theory-based data collection, and even how the different classes are defined—but Gilbert (2010) notes there remains a consistency of social consciousness in relation to occupational ratings, regardless of the time period, or the social standing of the respondent. This respondent consistency is reflected in the survey outcomes, which fluctuate only slightly from survey to survey.

An important aspect of the research around prestige is it not only relates to occupation and occupational status, but also to the innate hierarchy which exists within society. “The prestige hierarchy of a local community is based on detailed information about individuals and families, all seen through the lens of residents’ general understanding of the class system” (Gilbert, 2010, p. 22).

Status and power are separate concepts, but as research signifies, tend to go hand in hand when in concert with organizational hierarchies. Caston (1989) in his research of occupational power, noted that power is not only equated to the roles of authority, but also to the ability to act autonomously with their level within the hierarchy, determining how independently they control or have access to resources (p. 332). In their review of power and status of learning within groups, the shared goals of organizations, and knowledge transfer, Bunderson and Reagans (2011) explored the concepts of both power and status independently, but noted when it comes to the organizational hierarchy, they are heavily intertwined. Bunderson and Regans also examined access to learning resources within an organizational hierarchy in which, “lower-ranking

members are, by definition, more dependent on other members for valued resources, such as information, budget authorization, or even respect or approval” (p. 1184). In their review of social capital and status attainment in the workplace, Behtoui and Neergaard (2012) asserted “social capital...is related to individuals’ differential access to resources and the ways in which such differences reinforce social hierarchy” (p. 42). In a departure from the research of occupational status attainment, Behtoui and Neergaard state a peer group with the same social capital (based on demographic background, education, and SES) can affect a person’s rise within the organizational hierarchy, but their hypotheses provided the stipulation that the aid in social networks was in greater presence in those with advantaged family backgrounds.

As occupational status continues to be researched, it has become a key variable in research relating to social prestige, social status, organizational mobility, and how the U. S. population is characterized. This variable is extremely important to the purpose of this study as it may be associated to the value placed on training by occupational status, access to training resources, perceived opportunities available, and perceived organizational support.

Perceived Organizational Support

Organizational support theory as defined by Eisenberger, Huntington, Hutchison, and Sowa (1986) in their overall review of perceived organizational support, stated “to meet socioemotional needs, employees develop global beliefs concerning the extent to which the organization values their contributions and cares about their well-being” (p. 501). In this same study, Eisenberger, et al., asserted perceived organizational support is then developed by the need to anthropomorphize organizations into humanlike entities. Employees apply emotional characteristics to the organization in which the employee perceives support, and allows the employee to feel favored or appreciated. “Perceived organizational support would be influenced

by the frequency, extremity, and judged sincerity of statements of praise and approval” (Eisenberger et al., 1986, p. 501). The significance of this particular foundational definition is the term socioemotional as it denotes the support in organizational support theory and perceived organizational support are not to be confused with financial, or other tangible rewards.

Perceived organizational support has been researched to determine if it can be associated with tangible rewards like financial recompenses. In a study conducted by Rhoades and Eisenberger (2001) in their review of the literature about perceived organizational support, indicated when employees were surveyed or asked to designate reward structures, there was not enough data on tangible rewards like pay, to confirm it as a method of perceived support. Their review of the literature confirmed the attribution of support in the socioemotional context. Using these definitions of organizational support theory and perceived organizational support, and subsequent research, all instances of “support” as it is perceived by employees in reference to their employers and pertaining to this study will designate a socioemotional framework.

In matters of distributive justice as illustrated previously by Homans (1961), which denotes a fairness is applied in the distribution of opportunities and resources among employees, L. M. Shore and Shore (1995), in their book chapter dedicated to perceived organizational support and organizational justice, indicated a consistent and fair distribution of resources would positively impact perceived organizational support by demonstrating the organization’s concern for the well-being of their employees. Resources considered by Shore and Shore as they continued to define perceived organizational support, contained rewards like recognition, job security, autonomy, and training. The reward of job security is theorized to imply the organization’s wish to provide and continue a mutual and reciprocal relationship based on the organization’s positive appraisal of the employee’s contribution—reinforcing perceived organizational support. Autonomy (the perceived amount of control an employee has over their job within the organization) is a reward which research by Locke (1976) had deemed as highly

valued. According to Locke's research, autonomy positively impacts perceived organizational support as it implies the organization values the employee and trusts their ability to make decisions. Training is also highly valued and positively impacts perceived organizational support as an often restricted resource, which also implies a great investment in the employee and the desire of the organization to develop and nurture that person (L. M. Shore & Shore, 1995).

Perceived investment in employee development is also associated with perceived organizational support as defined by Bruvold and Lee (2003) in their study of job satisfaction, employee development, and turnover within nursing, "creates conditions where employees believe their organizations value their contribution and care about their employability" (p. 982). Malik, Abbas, Kiyani, and Malik (2011) in a similar study about job satisfaction, employee development, and turnover intent in banking institutions located in Pakistan, stated perceived investment in employee development is an "employees' assessment of their organizations' commitment to help employees learn to identify and obtain new skills and competencies which will allow them to move to new positions, either within or outside these organizations" (p. 1906). The result of both studies showed job satisfaction carried a mediating weight which affected the relationship between perceived support and turnover intent.

Kuvaas and Dysvik (2010) in their study of perceived supervisor support (PSS) and the affected outcomes of turnover and work performance as part of a survey among employees from a Norwegian telecommunications organization, determined PSS and perceived investment in employee development were positively related, if "managers are supportive by way of involving themselves in their employees' development, holding positive expectations, and providing daily support, ... by facilitating time and space for the participation in and the appliance of training content" (p. 141).

Dysvik and Kuvaas (2012) in another study, this time conducted among the employees of gas stations in Norway, reviewed the relationships between PSS, and business performance. In

this article, Dysvik and Kuvaas noted the importance of the supervisor in the distribution of training resources. If the supervisor distributes training based on personal bias—based on their relationship with the employee—the result would be a negative view of PSS. As noted earlier, supervisors are considered agents for the organization, and those negative feelings are applied to the department (if applicable) and the organization, in the socioemotional context of perceived organizational support.

Whitener (2001) in her article researching the link between commitment, the organization, and employees using a social exchange lens, conceptualized the practice of providing training to those who display commitment and motivation—with a strict interpretation of both. However, Whitener also provided a cross-level analysis which associated perceived organizational support, rewards, and training as they were associated with trust and commitment of the employee. Her study pulled a sample from similarly sized credit unions, with the added benefit of having a proportional spread of gender and occupational status. Whitener's hypotheses, drawing heavily from the work of Eisenberger (1997; 1986; 1999), found a positive association between positive commitment, trust, and perceived organizational support in the social exchange which included training and development. Whitener explained employee commitment as part of social exchange theory, creates an environment where employees become motivated to increase self-performance in order to accomplish the organization's goals.

Schuck, Twyford, Reio, and Schuck (2014) in their research into the links between human resource development, engagement, and turnover, notably pointed out “that not all learning and development opportunities within organizations are perceived equally across all levels and with all types of employees” (p. 240). Schuck et al., speculated this was especially true for those employees which feel unsupported—commonly those persons in low-income positions, or part of marginalized communities—in relation to their perceptions of investment in training, mentoring, leadership development, or skills development. Causes for impediment as

reviewed by Schuck's et al., article, listed restrictive policies and supervisors who do not communicate opportunities for training.

Shore, Tetrick, Lynch, and Barksdale's (2006) research of SET and the exchanges between employee and employer which perceived generalized organizational support (not specifically related to training) revealed: "higher levels of organizational investment are associated with social exchange relationships create feelings of employee obligation" (p. 140). Referencing Whitener's (2001) work, Shore et al., examined social exchange and the impact it can have on employee loyalty through the study of two separate demographics. The study supported the importance of perceived support and the resulting social exchange between employee and employer.

The research of perceived support indicates the power of the hierarchy is not limited to, but is certainly influenced by the distribution of resources. The employee's perceived support associated with their value and development within the organization is influenced by the communication and availability of those resources, but also whether they feel supported to participate. Those who do not perceive support may not react when (and if) they are made aware of available training, while others may feel discouraged and not participate.

Job Satisfaction and Job Training Satisfaction

One of the most researched and analyzed components in organizational development, with the possible exception of engagement, job satisfaction has undergone many reviews, updates, and theory applications since the early 20th century. Rainey (2009) in his book on managing public organizations stated: "thousands of studies and dozens of different questionnaire measures have made job satisfaction one of the most intensively studied variables in organizational research, if not the most studied" (p. 298). Abundant it may be, the concept is

integral to many forms of organizational research. Job satisfaction is connected with several outcomes in the workforce, including turnover, organizational commitment, rewards, and training. Job satisfaction has also been studied in relation to specific industries or focused on a certain group of employees. However it has been studied, job satisfaction has rich past in organizational and workforce development.

One of the first recognized forays into job satisfaction was published by Uhrbrock (1934) in which he used a new tool for workers, the survey. The results of the survey were meant to be used as a mechanism for management to aid in their organizational development, and to ask overall: “‘What is the attitude of employees toward the company's policies and practices?’ and ‘What can be done to remove points of irritation and improve attitude?’”(Uhrbrock, 1934, p. 365). In this survey, Uhrbrock formulated questions to test the employees’ in a large manufacturing organization regarding their attitudes by using a scale. Uhrbrock was intent on addressing all types of workers, and developing an instrument which included their views on the organization, their supervisors, equity (as defined during this time period), and the conditions in which they performed their jobs.

A well-known model of job satisfaction is the Range of Affect Theory by Locke (1976). By measuring different facets (autonomy, reward, training, etc.) of job satisfaction, Locke theorized satisfaction is determined by the gap between what one might desire in the workplace and what one actually has. The gap is also weighted by the amount of preference for a particular facet. In their article examining the three main determinants of Locke’s model, McFarlin and Rice (1991) attempted to recreate job satisfaction to test the facet value, the facet obtained, and the importance of the facet. “Locke argues that workers will only have high facet satisfaction when they perceive themselves as experiencing a desired amount of a facet and feel that the facet is important to them” (McFarlin & Rice, 1991, p. 25). Using one of Locke’s prescribed facets, McFarlin and Rice incorporated autonomy in their test. The result of McFarlin and Rice’s

research supported Locke's theory in which a person was satisfied when they received more of which they personally found value.

The reward structure can also create inequities. If a person feels that autonomy (as an example, but not included in this study) is important and in turn, is willing to expand their responsibilities, they may notice no increase in wages to compensate for the new tasks. Thus, their job satisfaction increases, but their negative organizational status is reinforced. Acker (2006), in a similar study of the Oregon frontline workers in the social service programs noted, "the workers liked the changes in the content of their jobs, but the hierarchy was still inviolate" (p. 449).

The dispositional approach is another well-known model for job satisfaction, which places the emphasis on achieving satisfaction on individual dispositions in personality, intelligence, and work attitudes by using a platform of organizational psychology. Researchers Staw and Cohen-Charash (2005) attempted to settle a long time dispute between organizational psychologists and other socially inclined scholars, where it was debated whether a person is disposed to specific work attitudes either by personality or by social forming. The dispositional approach, based on a five-factor personality model, believes solidly if a person is chronically dissatisfied, there is no remedy to be applied in the workplace to alter that particular attitude. The Big Five factors as described by De Feyter, Caers, Vigna, and Berings (2012) in their longitudinal study of academic performance in Belgium, are openness (innovative, curious), conscientiousness (organized, dependable), extraversion (positive, cheerful), agreeableness (compassionate, helpful), and neuroticism (emotional stability). Their study and other research tied to the Big Five were inconclusive and thus determined to be irrelevant to this paper (Bui, 2017; Jia, Jia, & Karau, 2013; Salgado, 1997).

Job training satisfaction draws heavily on the research of job satisfaction and the many components in which job satisfaction is determined and associated. Like most articles written on

organizational training, job training satisfaction also evaluates the outcomes of employer-provided training, but does so from the perspective of the employee. This employee perspective is gained to evaluate the overall feeling of value training has brought, the application of that training, and access to training resources. Training, defined by Landy (1985) in his book which reviewed the principals of behavior in the context of the workplace as:

[...] a set of planned activities on the part of an organization to increase job knowledge and skills or to modify the attitudes and social behaviour of its members in ways consistent with the goals of the organization and requirements of the job. (p. 306)

The overall concept of job training satisfaction was created to fill the gap between the perceptions of employees and overall feelings of their organizational training as a whole, unlike a typical training evaluation, which appraises the employee's feelings about individual training sessions typically seen in Kirkpatrick's four levels of evaluations of training programs: (1) reaction, (2) learning, (3) behavior, and (4) results (Kirkpatrick & Kirkpatrick, 2010). As exemplified by the Kirkpatrick model, training evaluation has predominantly been focused to achieve a training ROI for the organization. Job training satisfaction is focused on the employee, what they value in training, how training impacts their values, whether they perceived the training is equitably distributed, their perceptions of training applicability, and the gap between values and perceptions. Like job satisfaction, job training satisfaction is often evaluated to determine the relationships between workforce outcomes. These outcomes include (but are not limited to) the relationship between job training satisfaction and engagement, motivation (intrinsic and extrinsic), turnover intent, and organizational commitment.

Schmidt (2007) elaborated in his article reviewing the links between job training satisfaction and job training satisfaction, hypothesized that job training satisfaction not only focuses on the employee perception of training provided, but also if training is intentional and

planned, rather than executed informally or incidentally. Schmidt explained further positive relationships are found between training evaluations, perceived organizational support, and employee commitment, which implied job training satisfaction requires further exploration.

Schmidt continued with his claim:

Employees satisfied with job training are also more committed to their organizations, and employees who are satisfied in their jobs are more willing to accept organizational goals and values, more motivated, more willing to exert effort in the workplace, and more likely to stay in an organization. (p. 494)

The research on job training satisfaction is relatively new in comparison to workforce development and job satisfaction, and there are only a few researchers currently exploring this topic. This makes the research sparse, mostly conducted in Europe, and has not been reviewed in relation to staff training in higher education.

Summary

The review of literature related to equity, training in a hierarchy, perceived organizational support, job training satisfaction, and job satisfaction are key components which support this study. Equity is defined and historically reviewed to establish the chain of theories which led to its origination and also to explore the evolution of its definition as society progresses. Training in a hierarchy is defined by both the terminology of training and how it relates to a person's position within that hierarchy. Perceived organizational support is an important aspect as it can impact job performance to earn opportunities, participation in training, transfer of knowledge gained, and application of knowledge. Job training satisfaction associates the perceptions of employees' of overall organizational training and their feelings the organization's training efforts. Job satisfaction is the culmination of all concepts as they relate the overall feelings of contentment, commitment, and turnover intention.

From the review of research conducted for this chapter, there is an abundance of information regarding job satisfaction and the idea of fair treatment in the workplace. The most challenging aspect of this review was building the case of equity under this notion of fairness and perception. To properly define equity, it was integral to build a history of the concept, how it has been used in the past, how it has been used in the workplace, how it is used in diversity work, and how it is used in the present cultural and political climate today. Even with the significant review of equity's historical context, equity in its present use remained imprecise.

The review of job satisfaction, while not quite as popular as engagement, touches nearly every aspect of workforce development. The review of research found job satisfaction related to multiple concepts including engagement, turnover intent, organizational commitment, occupational status, prestige, training, organizational support, social mobility, peer support, motivation, and performance. More recent research has expanded upon the early works of job satisfaction by introducing contemporary metrics, but at its core, little has changed over the last five decades. As job satisfaction is so widely covered, it was surprising to find very little written related to staff job satisfaction in higher education institutions.

In searching for articles relating to higher education, the majority of literature revolves around postsecondary students or faculty in various ways. Higher education staff is minimally reviewed in research with a greater focus on faculty, but again predominantly tied to some aspect of the postsecondary student. When applied to the concept of equitable resource allocation to higher education, there is a scarcity of research relating to staff. Current equity research in higher education is almost exclusively devoted to the student, only including staff when it is also relevant to the student (i.e., experience with dining halls on campuses). Staff in higher education is virtually ignored in workforce development research.

Similarly, in reviewing job training satisfaction, no works in peer-reviewed journals have been published which directly relate to staff in higher education. In order to properly review the

literature, it was necessary to build around the concept and other contextual uses of job training satisfaction. Perceived organizational support as a concept is relatively new when compared to such theories as equity and job satisfaction. There is a fair amount of research on the same concept, but identified differently. This created a challenge in finding research using key phrases and required searches based on previous works and authorship. The concept itself, once reviewed, became a fortuitous repository of information relating to social mobility which led to greater information on occupational status and prestige.

Through the research of social mobility, occupational status was better defined in this study. Keeping the equity through diversity tie as a secondary dimension of diversity, occupational status as a social concept was greatly expanded upon, especially as defined by the U.S. Government. Unfortunately, there was again, minimal peer-reviewed work dedicated to occupational status and staff in higher education. The little information there relates directly to economics in the labor market, not providing much useful research for this study, other than the ability to benchmark the hierarchy of the staff designations.

Overall, this review of literature created a better understanding of the peripheral subjects which contribute to the primary concepts of job training satisfaction, job satisfaction, and perceived organizational support. It is those peripheral subjects who truly add a wealth to the way this study is conducted, the design of the survey instrument, and the design of the overall methodology.

Chapter 3

Method

This study examines the relationships among the variables of interest: job satisfaction, job training satisfaction, and perceived organizational support. Relationships are explored to determine how each variable affects the others, so each is treated as both independent and dependent variables for each relationship analysis. To explore the possible relationship among the variables of interest and equitable training opportunities, the research questions will also control for occupational status. Other control variables are explored for any relational value.

An ordinary least square regression analysis approach was utilized in this study to measure the relationships between continuous variables, ascertain the strength of those relationships, and refine the research questions for further study. To best collect data, the researcher employed a multi-faceted, cross-sectional continuous survey based on the literature around the primary concepts of job training satisfaction, job satisfaction, and perceived organizational support. The survey instrument was distributed to staff personnel using a self-report data source and not a sample population. The survey data collection method was chosen to allow the population a certain amount of confidentiality while obtaining information which might be perceived sensitive in the employer-employee power dynamic.

The survey instrument consists of demographic questions, and questions by factors of job training satisfaction, job satisfaction, and perceived occupational support. Responses to demographic questions consisted of predetermined ranges as well as federally regulated tools used to collect ethnicity data. Questions dedicated to the variables of interest were answered using Likert Scales. The only predetermined stratification of the population occurs in paper surveys sent to technical service personnel in hopes of an increased response.

Data

Sample

The sampling strategy used in this study relied on the participation of staff at Penn State University. To garner responses from the target population of staff and technical service employees of Penn State, this survey was distributed to those employed at the University Park main campus, over the age of 18, working full time, as either executive, staff, or technical service designations. These the particular requirements of employment were outlined in the invitation as well as included in the demographic questions to aid in the screening of such participants who did not meet the study guideline requirements. Due to the nature of participation as voluntary, this study will utilize the self-selection sample of the 10,122 eligible employees at University Park.

Survey

The survey instrument was piloted using Penn State University staff recruited by the researcher. Pilot participants included one executive, two managers, two staff, two clerical personnel, and two technical service employees. The survey was piloted, distributed, and coded through Qualtrics software, Copyright© 2017 (Qualtrics, 2005). Once the pilot group completed the survey, the researcher interviewed each participant individually to determine if any questions were misworded, confusing, or ordered in an inappropriate manner. When feedback was received, the instrument was revised and sent to the Institutional Review Board (IRB) at Penn State University. This study was approved by IRB from 12/18/2017 to 12/17/2018 under STUDY00008513.

Using Qualtrics, 11,715 surveys were distributed via direct email, and 1,300 paper surveys were distributed to technical service personnel—allowing technical service personnel two response possibilities with a shortened hyperlink provided in the paper instructions for optional online completion. Additionally, a social media link invitation to participate was placed on the researcher's personal Facebook page and then shared by colleagues and friends. To accommodate the three distribution pathways, three versions of the Qualtrics survey were created. The primary email distribution version was duplicated to allow for data entry of paper surveys, and another for the social media/online technical service entry link. Through the collection and distribution of the respondents Penn State email addresses, duplicate entries were discouraged.

Emails gleaned from public directories received a web-based survey, the invitation arriving via their PSU issued email account directly. Technical service employees also received a paper survey in their campus mailboxes or were disseminated by their supervisors. Paper surveys were distributed in a sealed envelope containing an invitation to participate, the survey, the informed consent documentation from Penn State's IRB, and an addressed envelope in which to return the completed survey. All persons invited to participate were offered the chance to win one of three \$50 Amazon gift cards, and one additional \$150 Amazon gift card. The instrument instructions contained requirements to participate, and the demographic collection portion of the survey also determined eligibility. As the invitation to participate covered all employees, but did not guarantee participation, there was no predetermined quota of those surveyed.

Confidentiality was maintained as all email addresses collected through email distribution, paper survey, and online social media link were coded in such a way that the researcher had no access to them once they were entered into Qualtrics. Paper surveys which requested the email address were scanned in, the email then redacted, and the originals shredded. All data was stored in Box, a secured cloud storage solution vetted by Penn State University Risk Management department.

Using methods to ensure a maximum response described by Dillman, Smyth, and Christian (2014), online, email, and paper surveys were distributed in a way to allow all respondents 28 calendar days to participate. Online surveys were open for 23 calendar days and allowed five business days after survey close to finish partially complete responses. Paper surveys were distributed two business days prior to the opening of the online version to allow for distribution if not delivered directly to a locker or facility mailbox. Paper surveys were not conducive to reminders, but email reminders were sent to unresponsive email invitations every seven calendar days as illustrated in Figure 1. Once the final survey entry closed—six business days after the online survey to allow for delivery of paper surveys, a participation appreciation email was sent to those who completed their surveys. From all three survey collection points, the Qualtrics sampling feature was employed to determine the winners of the Amazon gift cards.

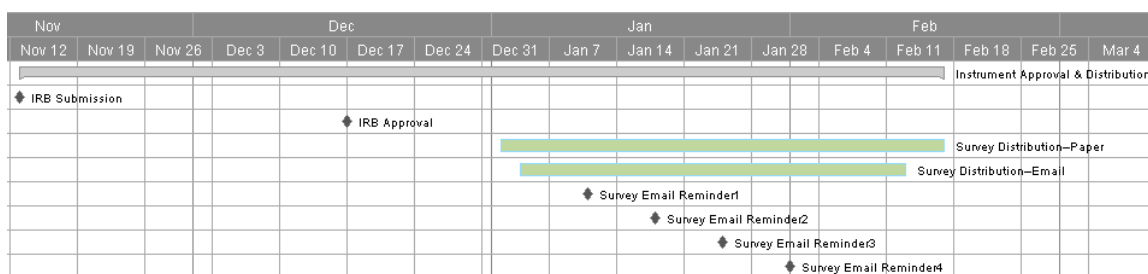


Figure 1. Job training satisfaction survey distribution timeline

Once data were collected and compiled, the functionality of Qualtrics was utilized to remove any duplicate entries. Of those surveys distributed, there were a total of 2,687 responses which included 2,443 email responses, 215 paper responses, and 29 social media responses. Of those submissions, only 21% of the 10,221 total possible responses ($n = 2,103$) were deemed usable. Invalidated surveys included those who indicated within the survey they chose not to participate, those who indicated they were not located at University Park, responding faculty members, responding volunteers or interns, student respondents, and any unfinished survey responses. Unfinished surveys were those began by participants, but not completed as designated

by the survey functionality. Those who chose NOT to participate did so after reading the informed consent disclaimers and opted out within the survey.

The response rate for those surveys returned completed, regardless of final inclusion, was 26%. Overall, this was not terribly high given the number of eligible participants. However, as a research university currently undergoing multiple organizational restructures, many surveys have been conducted over the last year, focusing on the staff community. As it happens, a compliance and ethics survey was sent to all staff members just 30 days prior to this survey. This creates a certain amount of survey fatigue, diminishing the returns of participation. Additionally, many emails are made public through multiple directories (as was a primary source for this study) and staff members are often spammed with invitations to participate in outside and sometimes phishing type surveys. The researcher received over 50 individual contacts ensuring the survey was legitimate.

Those who did respond included 20% of eligible executive employees, 23% of eligible staff, and 13% of eligible technical service employees (Penn State University Budget Office, 2017).

Instrument

The Job Training Satisfaction Survey (JTSS) is an instrument developed to assess job training satisfaction, job satisfaction, and perceived organizational support. Questions pertaining to demographics and job satisfaction were pulled from the publicly available Michigan Organizational Assessment Package (1975) which includes three parts, each part including multiple modules, each module including to varying degrees, over 100 questions. Additional job satisfaction questions were pulled from multiple sources, including The United States Office of Personnel Management 2016 Federal Employee ViewPoint Survey (publicly available), and Paul

Spector's 36-item, nine-factor Job Satisfaction Survey (available publicly for research purposes). Perceived organizational support questions posed were taken from the short version of the Survey of Perceived Organizational Support used by Eisenberger et al., (1986). Questions regarding job training satisfaction were selected from The Job Training and Job Satisfaction Survey Technical Manual created by Steven Schmidt (with permission received via email on 10/23/2017).

The JTSS includes five content areas: demographics (which includes occupational status), job training satisfaction, perceived organizational support, and job satisfaction. While each category is devoted to a specific variable, questions are structured for flow and consistency. The demographic questions collect information required for the control variables: length of employment, age, gender, racial identity, occupational status, and educational attainment. Please see Appendix C for a complete copy of the JTSS instrument.

Occupational status is collected by the self-reported job profile of each respondent and then coded as a categorical variable created from the evaluation of Penn State job families, job categories, job titles, and the respective level for each title, leaving the final job profile and unique job code. Using the Qualtrics drill down option in the online survey, each level of the job title is captured under each job category and the individual staff job profiles controlled by the human resources department at Penn State and illustrated in Figure 2 (The Pennsylvania State University, 2016). Paper surveys asked the respondent to write in their job titles to best categorize their ranking. However, if the participant responded "tech service" to the employment classification demographic question on a paper survey, they were automatically ranked. Of all paper surveys received, only one returned was not completed by a technical service employee.

Job Profiles		
	Example 1	Example 2
Job Family	EDUCATION	INFORMATION TECHNOLOGY
Job Category	EDUCATIONAL PROGRAM DESIGN, DEVELOPMENT AND DELIVERY	SYSTEMS
Job Title	Education Strategy and Planning Manager	Systems Design Specialist
Level	LEVEL 2	LEVEL 2
Details	Salary Band: J FLSA Status: Exempt	Salary Band: J FLSA Status: Non-Exempt
Typical Education & Experience	3+ years related experience Master's Degree or higher	2+ years related experience Associate's Degree or higher
Occupational Status Group Rank	Rank 2 -this ranking entails managers and supervisors with a high level of responsibility	Rank 3 -this ranking is encompasses all professional staff personnel with limited or no supervision responsibilities.

Source: Penn State human resources compensation and classification (Penn State University Human Resource Office, 2015)

Figure 2. Penn State University compensation & classification job profiles structure

Executive job profiles are not publicly available. If a respondent identified as an executive in the demographic collection, they were sorted into Rank 1—executives. Staff ranking characteristics considered were the salary band (see Appendix A for salary bands), level of each profile, the level of responsibility (strategic planning, university-wide committee membership, policy oversight, etc.), the exemption status (exempt/non-exempt), if the position supervised

others, the education/experience required, and the level of persons supervised (see Appendix B for job profile example). Occupational status rankings were then determined (and coded) with the above criteria as follows:

- Rank 1—this ranking is reserved for executive positions such as executive/administrative personnel. These positions do not carry publicized job description profiles with salary bands. Executives and administrators are the highest echelons of the organization. They are the decision makers, the strategic thinkers, and the visionaries behind organizational success. They carry titles—including, but not limited to—president, provost, director, and dean with various sub-designations of vice, assistant, or associate (Hodson & Sullivan, 2012b).
- Rank 2—this ranking entails managers and supervisors with a high level of responsibility. Criteria for this position: exempt, salary bands M, N, O, P and possibly I, J, K, L if title included manager or director, and if the description included supervision, budget management, or strategic planning. Managerial staff (and supervisors) oversee professionals and clerical staff. Managers are the persons in charge of work control, personnel, and budgets. They work autonomously, with scheduled reports to executive/administrative personnel (Hodson & Sullivan, 2012b).
- Rank 3—this ranking encompasses all professional staff personnel with limited or no supervisory responsibilities. Criteria for this position: exempt, salary bands I, J, K, L and F, G, H which did not include job duties of clerical support. Professional staff may supervise a limited number of employees. They are usually made up of persons with a small amount of autonomy, little room to make decisions that affect the department other than their individual or group tasks, and will often meet as a team to report to their supervisors (Hodson & Sullivan, 2012d).
- Rank 4—this ranking is for all clerical and support personnel. Criteria for this position: non-exempt, salary bands C, D, E, F, G, H with clerical support job duties and minor supervision of work study or other student workers. Clerical and support have little to no autonomy. They are expected to handle the transactional data and processes of the department while keeping in consistent contact with their supervisor(s) for direction and feedback (Hodson & Sullivan, 2012a).
- Rank 5—this ranking includes all technical service personnel. Technical service is a term attributed to those paid at an hourly rate, often unionized, who handle the manual labor within higher education. This group represents cashiers, food service employees, custodial personnel, plumbers, HVAC technicians, utility workers, electricians, waste handlers, and locksmiths (Hodson & Sullivan, 2012c).

To ensure the best assessment for each Job Profile was made, 846 individual job profiles were reviewed, especially when criteria were vague, or had the potential to fit into multiple rankings. It should be noted some positions require greater education and experience, but have limited or no supervisory duties. These would be exemplified in profiles of senior researchers or physicians. Alternatively, there are some positions which do not require high levels of education, but still exist in higher salary bands with supervisory duties—often driven by industry standards. These are demonstrated by the positions held by the Information Technology job family.

Factors, Constructs, and Definitions

The JTSS uses a five-point Likert scale in which respondents are asked to rank the amount to which they agree or disagree with the statements related to job training satisfaction, job satisfaction, and perceived organizational support. Positive, neutral, and negative response scales used in the survey are coded according to a five-point Likert scale from Strongly Disagree (1) to Strongly Agree (5).

The constructs for job training satisfaction were developed and based on the following definitions:

- *Time spent in training.* The number of hours spent in training over the last year while employed with the university is captured as an interval scale which is totaled to provide the summation of hours spent being training in-house by your employer, online training, being trained outside of your workplace, and attending conferences.
- *Employee feeling about training and development.* Feelings about training are captured in the aforementioned five-point Likert scale in which the respondent was asked questions pertaining to training received within the last year. Participants answered questions on whether they found the training valuable, or if the training added value to their current skills if they felt the training was intentionally provided and if they felt the training was fairly distributed.

- *Employee satisfaction with training.* Questions regarding satisfaction with training are tied to the immediate applicability of training with their current positions, and whether training received meets their current needs.

The constructs for perceived organizational support were developed and based on the following definitions:

- *Organizational support for training.* Questions about organizational training support were framed to be applicable to the respondent's career, both current and future. Questions were modeled to capture the purposefulness of organizational support for training and if the participant perceived organizational interest in their training.
- *Supervisor support for training.* Questions about perceived organizational support for training were adapted to determine if the employee feels their immediate supervisor or department is supportive of training and development, provides training intentionally, and if training is distributed fairly.

The constructs for job satisfaction were developed and based on the following definitions:

- *Satisfaction with current position.* Questions for perceived organizational support determine if the employee feels satisfied with their current duties, rewards, and position within the organization.
- *Satisfaction with supervisor.* The respondent is asked if they feel their immediate supervisor values them as an employee, is concerned about their success, and whether the supervisor shows an interest in the employee's personal or professional goals.
- *Satisfaction with organization.* The employee is asked questions to gauge whether they feel valued by the organization and if they perceive the organization to have an interest in their personal or professional goals.

Each construct was developed based on research reviewed in Chapter 2, and from previously published survey questions as noted in the instrument design. The questions developed for the survey were then adapted based on the construct definition and grouped to gain employee's perceptions of the constructs by department, supervisor, training, and overall feelings about their jobs. Grouping in this manner created a logical flow for the participant and allowed

for logical consistency as the variables were broken up within the instrument. Samples of survey questions are given in Table 2.

Construct Validity

Discerning the validity of survey results can be challenging. No one simple test can provide a researcher with an answer, but instead, the results must be analyzed in multiple ways to determine if the instrument actually asks questions which measures the variables of interest proposed in the study.

Table 2. *Sample survey questions by construct*

Construct	Question
Job Training Satisfaction	Training I have received over the last year: - is provided to help me gain new skills or increase my current skills
	Training I have received over the last year: - is applicable to my current job
	I have training goals designed to enhance my current work assignment and to prepare me for future positions
Job Satisfaction	In my current position: - I am happy in what I am doing
	In my current position: - Doing my job well gives me a good feeling
	In my current position: - I feel like what I'm doing is worthwhile
Perceived Organizational Support	I feel that my department: - provides me with enough training to do my job well
	I feel that my supervisor: - makes sure I have training goals to achieve
	I feel that my department: - cares about my general satisfaction at work

This study uses an ordinary least squared regression analysis. As such, it is important to test assumptions in order to prevent bias and discourage inaccurate claims in the findings. Each variable of interest was plotted against the same relationships reviewed in the research questions. Normality was tested with the linear regression model and examining the P-Plot of the standardized residual. All four research question relationships appeared normal.

Linearity was tested with each variable of interest plotted against the same relationships reviewed in the research questions, with the output of a scatterplot and a Loess line added which indicated the variables were indeed linear.

A residual scatterplot revealed little variance and heteroscedasticity. This was further tested and found each variable of interest was negatively skewed. Skewing is to be expected in a Likert scale response matrix and there is no one correct way to it; different researchers suggest different methods (Cohen, 1988; Edwards, 2002; O'Sullivan, Rassel, & Berner, 2002; Singpurwalla, 2013). Of the methods suggested, four were attempted. All methods tested the skewness with different transformations of the variables of interest. Ultimately, a square root model was chosen to transform the variables of interest. Finally, multicollinearity was tested against the research question relationships, resulting in VIF values confirming this assumption has been met.

Variables

Survey data was downloaded from Qualtrics and then analyzed using the statistical program SPSS (IBM Corporation, 2015). This study utilizes an ordinary least square regression analysis to answer the following research questions, illustrated in Figure 3.

Research Question 1: Is there a relationship between job training satisfaction and perceived organizational support?

Research Question 2: Is there a relationship between job training satisfaction and job satisfaction?

Research Question 3: Is there a relationship between perceived organizational support and job satisfaction?

Research Question 4: Is there a relationship between perceived organizational support and job training satisfaction?

The variables of interest relating to the research questions are job training satisfaction, job training satisfaction, and perceived organizational support.

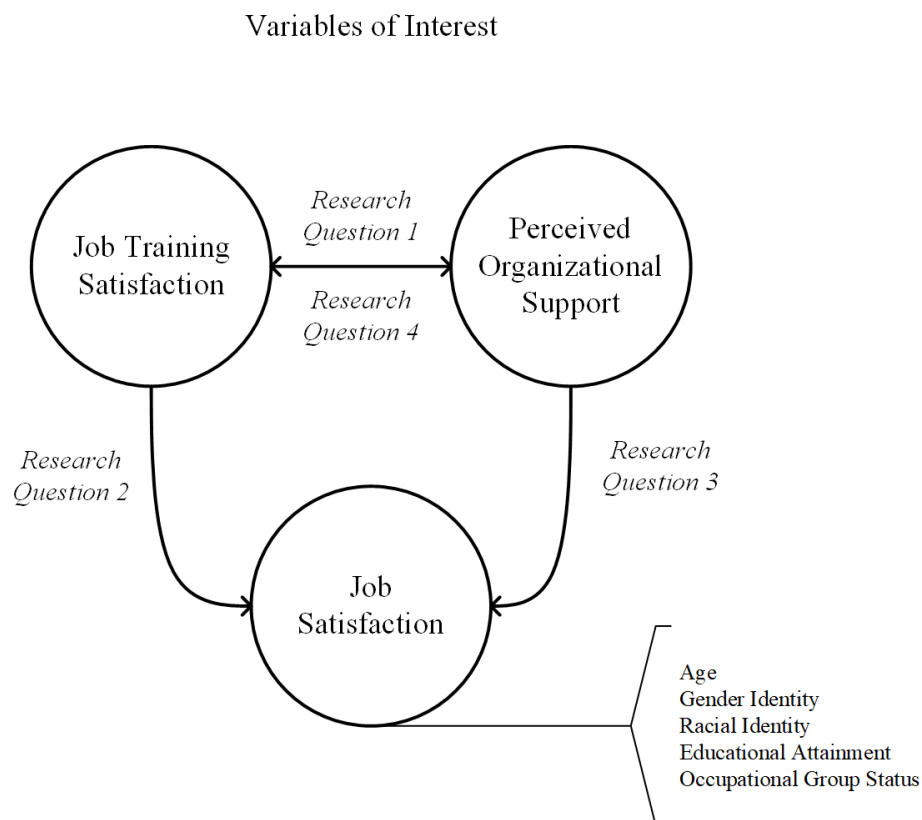


Figure 3. Research model

Variables of Interest

To determine the relationships among job training satisfaction, job satisfaction, and perceived organizational support, the Likert scale responses were transformed using the SPSS compute variable operation. The combined job satisfaction variable was computed by transforming the 12 Likert scale responses (JS1-JS12) into the simple sum for each individual respondent. Similarly, the seven perceived organizational support Likert responses (POS1-POS7) and the six job training satisfaction Likert responses (JTS1-JTS6) were transformed to their simple sum calculation.

The result of the transformation of 25 variables into three summed variables enables the use of a linear regression in which to measure the relationship between the variables of interest, the control variables, and any such combinations therein to address research questions as well as to determine the relationship of the control variables.

Control Variables

Control variables were collected through demographic information questions. These questions included gender identity, racial identity, age, educational attainment, length of employment, and occupational status. Survey returns and demographic report descriptions for all respondents are depicted Table 3. To provide the best analysis across the variable spread, some variables were then condensed into two or three categories. For instance, the return on gender identity ($n = 2,103$) is primarily comprised of the results of two categories at 98.8%. These categories (male and female) were so dominant, the remaining three categories yielded results so minor ($n = 26$), the variable was recoded to into dummy variable categories where Male = 0, and Female = 1. The remaining responses outside of those variables were revalued as missing.

Table 3. *Survey participant descriptive statistics*

Variable	<i>n</i>		<i>n</i> (%)
	Valid	Missing	
Age	2,103	0	
19-24			101 (4.8%)
25-34			498 (23.7%)
35-44			567 (27%)
45-54			583 (27.7%)
55+			354 (16.8%)
Occupational Status	2,051	52	
Executive			21 (1%)
Managers & Directors			242(11.5%)
Supervisors & Staff			1,061 (50.5%)
Clerical & Support			476 (22.6%)
Technical Service			251 (11.9%)
Educational Attainment	2,097	6	
High School diploma			220 (10.5%)
Some college or current attending			221 (10.5%)

Variable	<i>n</i>		<i>n</i> (%)
	Valid	Missing	
Associates or certification			262 (12.5%)
Bachelors 4 yr degree			829 (39.4%)
Master's degree			492 (23.4%)
Professional (JD, PhD, MD)			73 (3.5%)
Racial Identification	2,056	47	
White			1,950 (92.7%)
Black or African American			41 (1.9%)
American Indian or Alaskan Native			2 (0.1%)
Asian			34 (1.6%)
Native Hawaiian or Pacific Islander			1 (0.0%)
Other			28 (1.3%)
Gender Identity	2,100	3	
Male			737 (35%)
Female			1,337 (63.6%)
Non-binary third gender			1 (0.0%)
Prefer to self-describe			22 (1.0%)
Prefer not to say			3 (0.1%)

Similar to the recoding of the gender variable, other control variables were analyzed for their effectiveness in establishing relationships. Upon review, the homogeneity existing between length of employment and participant age negated the validity of one variable. Participant age was selected as the preferred subject variable of use. Age categories were then further condensed by grouping the five age categories into two separate categories. Those categories are now represented by those ages 19 - 44 = 0, and those over the age of 45 = 1.

Due to the lack of racial and ethnic diversity of the population surveyed, other variables have been omitted from the control variable relationship analysis. Racial identification and ethnicity (Spanish, Latino, or Hispanic) have so little variance as to reveal any possible difference in the regression results. Educational attainment has been reduced to three categories to better represent the responding population, the categories transformed to now to which secondary refers to the highest degree earned is a High School Diploma or HSE (including those may currently be attending a postsecondary institution, or have obtained some postsecondary credits, but did not achieve a degree), postsecondary refers to any degree earned after high school which is not a graduate degree, and graduate degrees are those attained after a baccalaureate degree. New

variables based on these definitions are categorized as “postsecondary rather than secondary” where secondary attainment = 0, postsecondary attainment = 1. The secondary variable renamed as “graduate rather than secondary” where secondary attainment = 0, and graduate attainment = 1.

Occupational status has been condensed as a result of initial analysis which revealed little variance between the five original groups, but displayed a moderately higher distribution when combined into three groups. Variables were created for each new dummy variable. Those variables are now listed as “tech service rather than staff” where staff = 0, and tech service = 1. The secondary variable for occupational status created is listed as “clerical/support rather than staff” where staff = 0, and clerical/support = 1. The tertiary variable for occupational status is now listed as “manager/exec rather than staff” where staff = 0, and mgrs/exec = 1. The groups were combined to give a reliable account of training opportunities by occupational status as the hierarchy is represented in three predominant spheres of job categories.

Analysis

To examine each research question, an ordinary least square regression was conducted to investigate whether or not the independent variable has a relationship with the dependent variable. The variables of interest will both serve as dependent or independent based on the relationship each research question is attempting to determine. A regression analysis is appropriate as the intent of this study is to assess the existence of a relationship (and the power of that relationship) between two continuous variables.

In this study, the following regression equation will be used: $y = b_1x + c$, where y = dependent variable, c = constant, b = an unstandardized regression coefficient and x = independent variable. The F -test was used to determine if the independent variables were

associated with the dependent variable. R^2 is used to determine how much variance in the dependent variable affects the independent variable.

A 95% confidence interval (CI) was constructed around each b coefficient. A 95% CI which *included zero* in its range meant the independent variable *was not related* to the dependent variable. A 95% CI which *did not include zero* in its range meant the independent variable *was related to* the dependent variable. Depending on the sign, positive or negative, of the b coefficient the independent variable was either positively or negatively related to the dependent variable. A point estimate of the magnitude of the association of a one unit change in the independent variable on the dependent variable was given by b .

The variables of interest were transformed to the sum, the mean, the median, and the square root. Homoscedasticity was once again tested, indicating a strong presence of heteroscedasticity remained between all transformations except the square root model. In the square root model, the variables were no longer stacked, although remained negatively skewed, to a much lesser extent, meeting the minimum distribution required.

The transformation of variables to the square root is not unprecedented in regression analyses and has been used with the caveat that both the dependent and independent variables are the product of a square root transformation (Cohen, 1988; Edwards, 2002; Singpurwalla, 2013). Researchers noted that to present the final coefficients and confidence intervals in their square root form would be misleading, and suggested squaring of the final results before presenting the analysis. Utilizing the square root transformation, assumptions were re-tested on each research question relationship, confirming normality and linearity were still present.

Research Limitations

Reproducibility is the goal of many research dissertations, and the model here is such that it may be generalized for use at any other organization. The specific results will not fare well in generalization or replication as the data are specific to this institution and its demographic. While Penn State is a large institution, it is located in a very rural part of central Pennsylvania.

According to the Census Bureau's Quick Facts population estimates (U.S. Department of Commerce, 2017) Centre County, PA—which encompasses University Park and the surrounding areas—reports a white (not Hispanic or Latino) population of 85.7%. Educational attainment of a baccalaureate degree of residents of Centre County is 42.4% (U.S. Department of Commerce, 2017). These demographics may change slightly, or drastically, depending on the region and the employers available in that specific area. In Centre County, Penn State University is the largest employer, unlike other institutions in an urban area, which may have more industry and a vastly different demographic with greater diversity (Pennsylvania Center for Workforce Information & Analysis, 2017).

The reliance on self-selection is another limitation. The propensity for bias can be greater as the participants decide whether they wish to participate, a decision which may be related to a positive or negative feeling they have about the subject (Olsen, 2011). It is the hope of the researcher by offering the incentive to participate, there is a social exchange created with tokens of appreciation rather than payment (Dillman et al., 2014). Some researchers have found a relationship between response rates and cash incentives, while others believe there is little difference. Some researchers believe non-cash incentives, like charity donations or small items of value, have a greater influence on the response rate (Lavrakas, 2008, p. 331). Due to the confidentiality ensured by the researcher, the ability to provide cash incentives through a mostly anonymous avenue seemed most prudent.

Chapter 4

Findings

This section will present the research question findings, exhibiting the relationships between the variables of interest and the control variables.

Research Questions

Research Question 1: Is there a relationship between job training satisfaction and perceived organizational support?

Research question one was evaluated using perceived organizational support as the dependent variable and job training satisfaction as the predictor. Twenty cases were identified as outliers outside of three *SD*. To consider the integrity of the survey, and the limitation of self-selection bias, outlying cases were included in the analysis. Missing data were coded to exclude cases listwise, limiting the *n* per variable to completed variables for the research question analyzed.

The result of this regression indicated a moderate level of association as seen in Table 4. Analysis indicates job training satisfaction accounts for 47% of the variation as a significant predictor of perceived organizational support. The estimated rate of change in perceived organizational support, when job training satisfaction is fixed, is between 0.73 and 0.80 points (Cohen, 1988).

Control variables were applied and all were found to have a minimal effect on perceived organizational support. Those displayed with a positive or negative *b* predictor were not considered related if their 95% CI spanned zero or extremely close to zero. The result of the

analysis including the control variables indicates a moderately positive relationship. However, the control variables are less easily qualified and are all statistically insignificant.

Table 4. *Correlations, means, standard deviations, and unstandardized regression coefficients for the association of Job Training Satisfaction with Perceived Organizational Support (n = 2,103)*

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	<i>Correlations</i>								
<i>Dependent</i>									
1. Perceived Organizational Support	1								
<i>Independent</i>									
2. Job Training Satisfaction	0.69**	1							
<i>Control</i>									
3. Female rather than Male	-0.02	-0.09**	1						
4. Postsecondary rather than secondary	-0.05*	-.02	-0.02	1					
5. Graduate rather than secondary	0.02	-.04	0.00	-0.63**	1				
6. Tech Service rather than Staff	0.07**	0.16**	-0.22**	-0.12**	-0.21**	1			
7. Clerical/Support rather than Staff	0.04	-0.06**	0.28**	0.09**	-0.17**	-0.21**	1		
8. Manager/Exec rather than Staff	-0.00	-0.02	-0.09**	-0.11**	0.24**	-0.14**	-0.21**	1	
9. ≥45 years rather than <45	0.04	0.02	0.07**	-0.10**	-0.05*	0.04	0.00	0.10**	1
	<i>Means & Standard Deviations</i>								
<i>M</i>	2.95	2.76	0.64	0.52	0.27	0.12	0.23	0.12	0.45
<i>SD</i>	1.13	1.07	0.48	0.50	0.44	0.33	0.42	0.33	0.50
	<i>Simple Least-Squares Regression^a</i>								
<i>b</i>		0.76							
95%CI of <i>b</i>		[0.73; 0.80]							
	<i>Least Squares Regression with Control Variables Added^b</i>								
<i>b</i>		0.77	0.11	-0.05	0.11	-0.09	-0.03	-0.02	0.05
95%CI of <i>b</i>		[0.73, 0.81]	[0.03, 0.18]	[-0.11, 0.10]	[-0.01, 0.23]	[-0.22, 0.38]	[-0.12, 0.06]	[-0.14, 0.09]	[-0.03, 0.12]

Notes: **Correlation is significant at the 0.01 level (2-tailed), *Correlation is significant at the 0.05 level (2-tailed), Coefficients and confidence intervals have been squared to account for SQRT transformations applied to independent and dependent variables

^a $R^2 = 0.47$, $F(1, 2101) = 1856.96$, $p < 0.005$, intercept = 0.85; ^b $R^2 = 0.48$, $F(8, 2009) = 227.89$, $p < 0.005$, intercept = 0.73

Research Question 2: Is there a relationship between job training satisfaction and job satisfaction?

Research question two was evaluated with a linear regression model using job satisfaction as the dependent variable and job training satisfaction as the predictor. Twenty-two cases were identified as outliers outside of three *SD*. To consider the integrity of the survey, and the aforementioned limitation of self-selection bias, the outlying cases were included in the analysis. All missing data were coded within SPSS to exclude cases listwise, limiting the *n* per variable to completed variables for the research question analyzed.

The result of this regression indicated a small level of association as seen in Table 5. Analysis indicates job training satisfaction accounts for 36% of the variation as a significant predictor of job satisfaction. The estimated rate of change of job satisfaction, when job training satisfaction is fixed, is between 0.78 and 0.87 points (Cohen, 1988).

Control variables were applied and all were found to have a minimal to no effect on job satisfaction. Even those displayed with a negative *b* predictor might be considered positive as their 95% CI spanned zero or extremely close to zero. The result of the linear regression in research question two with control variables indicates a small positive effect of job training satisfaction with job satisfaction. This specific analysis of independent and dependent variables displays a positive predictor, but the control variables are less easily qualified and are all statistically insignificant.

Table 5. Correlations, means, standard deviations, and unstandardized regression coefficients for the association of Job Training Satisfaction with Job Satisfaction (n = 2,103)

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<i>Correlations</i>									
<i>Dependent</i>									
1. Job Satisfaction	1								
<i>Independent</i>									
2. Job Training Satisfaction	0.60**	1							
<i>Control</i>									
3. Female rather than male	-0.03	-0.09**	1						
4. Postsecondary rather than secondary	-0.01	-0.02	-0.02	1					
5. Graduate rather than secondary	-0.04	-0.04	0.00	-0.63**	1				
6. Tech Service rather than Staff	0.12**	0.16**	-0.22**	-0.12**	-0.21**	1			
7. Clerical/Support rather than Staff	0.01	-0.06**	0.28**	0.09**	-0.17**	-0.20**	1		
8. Manager/Exec rather than Staff	-0.06*	-0.02	-0.09**	-0.11**	0.24**	-0.14**	-0.20**	1	
9. ≥45 years rather than <45	-0.02	0.02	0.07**	-0.01**	-0.05*	0.04	.00	.10**	1
<i>Means & Standard Deviations</i>									
<i>M</i>	3.27	2.76	0.64	0.52	0.27	0.12	0.23	0.12	0.45
<i>SD</i>	1.39	1.02	0.48	0.50	0.44	0.33	0.42	0.33	0.50
<i>Simple Least-Squares Regression^a</i>									
<i>b</i>		0.82							
95%CI of <i>b</i>		[0.78; 0.87]							
<i>Least Squares Regression with Control Variables Added^b</i>									
<i>b</i>		0.82	0.06	0.07	0.07	0.12	0.08	-0.16	0.20
95%CI of <i>b</i>		[0.78, 0.87]	[-0.05, 0.17]	[-0.07, 0.20]	[-0.09, 0.22]	[-0.05, 0.29]	[-0.05, 0.20]	[-0.31, -0.004]	[-0.79, 0.12]

Notes: **Correlation is statistically significant at the 0.01 level (2-tailed), *Correlation is statistically significant at the 0.05 level (2-tailed), Coefficients and confidence intervals have been squared to account for SQRT transformations applied to independent and dependent variables

^aR²= 0.36, *F* (1, 2101) = 1,472.91, *p* < 0.005, intercept = 0.99; ^b R²= 0.37, *F* (8, 2009) = 177.06, *p* < 0.005, intercept = 0.89

Research Question 3: Is there a relationship between perceived organizational support and job satisfaction?

Research question three is evaluated with a linear regression model using job satisfaction as the dependent variable and perceived organizational support as the predictor. Thirty-three cases were identified as outliers outside of three *SD*. To consider the integrity of the survey, and the aforementioned limitation of self-selection bias, the outlying cases were included in the analysis. All missing data were coded within SPSS to exclude cases listwise, limiting the *n* per variable to completed variables for the research question analyzed.

The result of this regression indicated a strong level of association as seen in Table 6. Analysis indicates perceived organizational support accounts for 71% of the variation as a significant predictor of job satisfaction. The estimated rate of change of job satisfaction, when perceived organizational support is fixed, is between 1.01 and 1.07 points (Cohen, 1988).

Control variables were applied and most were found to have a minimal to no effect on job satisfaction. Even those displayed with a negative *b* predictor might be considered positive as their 95% CI spanned zero or extremely close to zero. The result of the linear regression in research question three indicates a small positive effect of perceived organizational support on job satisfaction. This specific analysis of independent and dependent variables displays a positive predictor, but the control variables are less easily qualified and are most statistically insignificant. However, this particular regression, with the addition of the control variables revealed a statistically significant positive relationship between tech service employees (control), perceived organizational support (independent), and job satisfaction (dependent).

Table 6. Correlations, means, standard deviations, and unstandardized regression coefficients for the association of Perceived Organizational Support with Job Satisfaction (n = 2,103)

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	<i>Correlations</i>								
<i>Dependent</i>									
1. Job Satisfaction	1								
<i>Independent</i>									
2. Perceived Organizational Support	0.84**	1							
<i>Control</i>									
3. Female rather than male	-0.03	-0.02	1						
4. Postsecondary rather than secondary	-0.01	-0.05*	-0.02	1					
5. Graduate rather than secondary	-0.04	0.02	0.00	-0.63**	1				
6. Tech Service rather than Staff	0.12**	0.07**	-0.22**	-0.12**	-0.21**	1			
7. Clerical/Support rather than Staff	-0.01	-0.04	0.28**	0.09**	-0.17**	-0.21**	1		
8. Manager/Exec rather than Staff	-0.05*	-0.004	-0.09**	-0.11**	0.24**	-0.14**	-0.21**	1	
9. ≥45 years rather than <45	0.02	0.04	0.07**	-0.10**	-0.05*	0.04	.00	0.10**	1
	<i>Means & Standard Deviations</i>								
<i>M</i>	3.27	2.95	0.64	0.52	0.27	0.12	0.23	0.12	0.45
<i>SD</i>	1.39	1.13	0.48	0.50	0.44	0.33	0.42	0.33	0.50
	<i>Simple Least-Squares Regression^a</i>								
<i>b</i>		1.04							
95%CI of <i>b</i>		[1.01, 1.07]							
	<i>Least Squares Regression with Control Variables Added^b</i>								
<i>b</i>		1.04	-0.05	0.07	-0.05	0.22	0.11	-0.14	-0.03
95%CI of <i>b</i>		[1.01, 1.07]	[-0.12, 0.02]	[-0.02, 0.16]	[-0.16, 0.06]	[0.11, 0.34]	[0.02, 0.19]	[-0.24, -0.03]	[-0.10, 0.04]

Notes: **Correlation is significant at the 0.01 level (2-tailed), *Correlation is significant at the 0.05 level (2-tailed), Coefficients and confidence intervals have been squared to account for SQRT transformations applied to independent and dependent variables

^a $R^2 = 0.71$, $F(1, 2101) = 5202.78$, $p < 0.005$, intercept = 0.21; ^b $R^2 = 0.72$, $F(8, 2099) = 654.73$, $p < 0.005$, intercept = 0.19

Research Question 4: Is there a relationship between perceived organizational support and job training satisfaction?

Research question four is evaluated with a linear regression model using job training satisfaction as the dependent variable and perceived organizational support as the predictor. Twenty cases were identified as outliers outside of three *SD*. To consider the integrity of the survey, and the aforementioned limitation of self-selection bias, the outlying cases were included in the analysis. All missing data were coded within SPSS to exclude cases listwise, limiting the *n* per variable to completed variables for the research question analyzed.

The result of this regression indicated a small level of association as seen in Table 7. Analysis indicates perceived organizational support accounts for 47% of the variance as a significant predictor of job training satisfaction. The estimated rate of change of job training satisfaction, when perceived organizational support is fixed, is between 0.59 and 0.64 points (Cohen, 1988).

Control variables were applied and most were found to have a minimal to no effect on job training satisfaction. Even those displayed with a negative *b* predictor might be considered positive as their 95% CI spanned zero or extremely close to zero. The result of the linear regression in research question four indicates a small positive effect of perceived organizational support on job training satisfaction with control variables applied. This specific analysis of independent and dependent variables displays a positive predictor, but the control variables are less easily qualified and are most statistically insignificant. This particular regression, with the addition of the control variables, revealed a statistically significant positive relationship between tech service employees (control), perceived organizational support (independent), and job training satisfaction (dependent).

Table 7. Correlations, means, standard deviations, and unstandardized regression coefficients for the association of Perceived Organizational Support with Job Training Satisfaction (n = 2,103)

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<i>Correlations</i>									
<i>Dependent</i>									
1. Job Training Satisfaction	1								
<i>Independent</i>									
2. Perceived Organizational Support	0.69**	1							
<i>Control</i>									
3. Female rather than male	-0.02	-0.09**	1						
4. Postsecondary rather than secondary	-0.05	-0.02	-0.02	1					
5. Graduate rather than secondary	0.02	-0.04	0.00	-0.63**	1				
6. Tech Service rather than Staff	0.07**	0.16**	-0.22**	-0.12**	-0.21**	1			
7. Clerical/Support rather than Staff	-0.04	-0.06**	0.28**	0.09**	-0.17**	-0.21**	1		
8. Manager/Exec rather than Staff	0.004	-0.02	-0.09**	-0.11**	0.24**	-0.14**	-0.20**	1	
9. ≥45 years rather than <45	-0.04	0.02	0.07**	-0.01**	-0.05*	0.04	.00	.10**	1
<i>Means & Standard Deviations</i>									
<i>M</i>	2.95	2.76	0.64	0.52	0.27	0.12	0.23	0.12	0.45
<i>SD</i>	1.13	1.02	0.48	0.50	0.44	0.33	0.42	0.33	0.50
<i>Simple Least-Squares Regression^a</i>									
<i>b</i>		0.62							
95%CI of <i>b</i>		[0.59, 0.64]							
<i>Least Squares Regression with Control Variables Added^b</i>									
<i>b</i>		0.61	-0.13	-0.03	-0.11	0.27	-0.01	-0.01	-0.02
95%CI of <i>b</i>		[0.58, 0.64]	[-0.20, -0.06]	[-0.12, 0.06]	[-0.22, -0.09]	[0.15, 0.38]	[-0.10, 0.07]	[-0.11, 0.01]	[-0.8, 0.5]

Notes: **Correlation is significant at the 0.01 level (2-tailed), *Correlation is significant at the 0.05 level (2-tailed), Coefficients and confidence intervals are squared to account for SQRT transformations applied to independent and dependent variables

^a $R^2 = 0.47$, $F(1, 2101) = 1856.95$, $p < 0.005$, intercept = 0.94; ^b $R^2 = 0.49$, $F(8, 2099) = 238.69$, $p < 0.005$, intercept = 1.05

Chapter 5

Discussion

Summary of the Findings

The purpose of this study was to determine what relationships exist between job training satisfaction, job satisfaction, and perceived organizational support when surveying the staff population at Penn State University. A potential outcome of this research was to examine employee responses by occupational status to determine if any relationship exists between their organizational ranking and their satisfaction with training, their job, and how they perceive organizational support.

The result of all research questions indicated a moderate to strong positive and statistically significant relationship between the independent variable and the dependent variable as designated by the research question. In research question one, job training satisfaction is positively related with perceived organizational support and females and those with advanced graduate degrees were positively related (*ns*) to perceived organizational support, but only at a minimal level.

In research question two, job training satisfaction is positively related to job satisfaction, but tech service is negatively related (*ns*) with job satisfaction. Other control variables remain similar in nature when compared to the first research question.

Research question three revealed a significant relationship between the control variable tech service and perceived organizational support with job satisfaction. The most notable account of this particular regression analysis is the emergence of a statistically significant relationship between a control variable and the dependent variable. In this analysis of the relationship

between the independent variable of perceived organizational support and the dependent variable job satisfaction, tech service is positively related ($b = 0.22, p = < 0.001$).

Research question four also shares the emergence of a statistically significant relationship between control variables and the dependent variable. In this analysis of the relationship between the independent variable of perceived organizational support with job training satisfaction, tech service is positively related ($b = 0.27, p = < 0.001$) and females are negatively related ($b = -0.13, p = < 0.001$).

Overall, the statistical findings of this study were somewhat inconclusive. Of the research questions analyzed, question three indicates the strongest relationship between the variables of interest, with perceived organizational support as the independent variable. After reviewing the four relationships posited through the research questions, little information is gained through the control variables with the exception of instances when perceived organizational support is the independent variable, creating significant relationships with two control variables. Of those relationships, tech service is the only consistency, a potential indication that perceiving a positive level of organizational support is predicted to increase satisfaction in job training and overall job satisfaction.

The Western Australian Training and Workforce Development department described equitable training as “equality of access to, and potentially equal outcomes from training regardless of the individual's circumstances, background and identity” (Government of Western Australia Department of Training and Workforce Development, 2010).

There are too many variables qualifying equity to significantly assign it as an outcome of this study. While the perception of employees is considered in the survey as they report the training hours received over the last year, and their satisfaction with training opportunities, the access to training resources is sometimes the victim of communication in an institution as large as Penn State. Just one example, departmental offerings, while open to the rest of the university,

may not be made known to other departments in a timely manner. Additionally, tech service has within their union contract a minimum of training hours they must meet every year, and restrictions to what those training entail (location, duration, start/end times, etc.). Other factors which affect all personnel, regardless of occupational status, include motivation, self-efficacy, and social support—none of which are captured in this study. As such, it is only fair to represent the training hours as they are reported, without implication of meaning or analysis.

Staff and tech service personnel were asked to fill in their employee-sponsored training hours completed over the last year. Training hours were segmented in the survey into the types of training this paper would use to specifically target the types of training common to the higher education staff community. The training types are employer-provided in-house training, employer-sponsored outside training, employer-sponsored online training, employer-sponsored (financed) conferences, and an overall estimate of unknown types of hours of training in the last year. Table 8 displays the results of the training hours for all staff employee survey respondents.

Table 8. Means of employer-provided training hours by occupational status (n = 2,051)

Occupational Status	Executive	Managers & Directors	Supervisors & Staff	Clerical & Support	Technical Service
Employer Provided In-house Training Hours (%n = 1.0%)	14.5	9.09	4.18	13.14	1.82
Employer Sponsored Online Training Hours (%n = 11.7%)	13.43	9.53	3.75	13.85	3.51
Employer Sponsored Outside Training Hours (%n = 52.1%)	12.12	8.10	3.18	10.11	4.38
Employer Sponsored (Financed) Conference Hours (%n = 23.2%)	10.8	6.26	2.88	2.67	4.60
Unknown Type Estimated Training Hours (%n = 12%)	8.36	5.28	3.61	1.03	8.46

Notes: These hours reflect the last year from the time of respondent survey participation and the self-reported hours as recalled by the employee survey participant.

Summary of the Literature

As noted in Chapter 2, there are many factors which contribute to the current definitions of job satisfaction, job training satisfaction, and perceived organizational support. A review of current literature agrees the three primary variables are positively related, and often researched to tie in their effects to influence common workplace outcome factors, such as turnover intention, employee commitment, organizational justice, and work engagement. While there are many studies which capture two of the three variables of interest in this paper, none were found to encapsulate all three.

The most applicable of the literature reviewed were the works centered on perceived organizational support, as researched by Eisenberger et. al. (1986). Perceived organizational support was found to be a strong influence on the reciprocal relationship between the employee and the organization. Other publications in which Eisenberger is an author, found perceived organizational support has a strong relationship with job satisfaction, as this study confirms. Studies relating to Eisenberger's work on perceived organizational support also found positive relationships with perceived investment in employee development and organizational justice—relating to their satisfaction with training, and access to opportunities.

Much of the research regarding job training satisfaction has been conducted by Steven W. Schmidt from West Carolina University, who was consulted during this study. Schmidt's research also reviewed job training satisfaction between dimensions of diversity, using the dimensions of job tenure and position (Schmidt, 2009). Of the other studies of job training satisfaction captured in the review of the literature, focused primarily on training transfer as the most positive outcome. Others were guided by whether the investment in training held any relationship with factors like engagement, or turnover intention. The few studies which partially resembled the variables of this paper did confirm positive relationships. The relationship with the

greatest amount of influence were those which measured perceived organizational support and job satisfaction, which was also the strongest relationship measured in this paper.

Discussion

Job training satisfaction, job satisfaction, perceived organizational support, and the possibility of equitable training are all components which affect engagement, turnover intent, employee commitment, motivation, self-efficacy, performance, and behavior. The primary purpose of this study was to evaluate the relationships between the variables of interest, and determine if the control variables also influenced those relationships, potentially illustrating perceived equity in training. Access to metrics which would determine outcomes like performance, turnover, and absenteeism were not available. However, the results of this study and the studies it was built upon, garnered insight into the perceptions of staff employees in a large research university. The data collected here might be interpreted to show training is distributed in greater amounts to those higher in the organization, but variables which influence that metric are not measured.

The common theme emerging from the survey results indicate perceived organizational support is an aspect which should be further investigated. If perceived organizational support does relate positively to job training satisfaction and job satisfaction, then it might also relate positively to engagement, motivation, self-efficacy, and employee commitment. As explained in the literature reviewed in this article, the social exchange created by perceived organizational support can also mitigate other outcomes like absenteeism and turnover intention.

Job satisfaction is another aspect of study in which positive relationships are found. While not as strong as perceived organizational support, the relationships between any variable of interest and job satisfaction indicate this is worth further study. Questions were posed to

determine in what rewards the respondent found value, but this was crafted to provide an overall effect. For instance, results from the job satisfaction question, “Supervisor: Supports my need to balance work and other life issues” resulted in an overall response mean greater than four indicating somewhat agree. However, when broken down by the five ranked occupational groups, this question has interesting an interesting disparity. While all occupational groups reported a mean over four (somewhat agree), technical service personnel reported a mean of three (neither agree nor disagree) indicating a group selecting lower ranges in the Likert scale consistently. A table of non-demographic survey responses grouped by variables of interest and occupational status is located in Appendix D.

Job training satisfaction data collection was designed to determine if employees felt they were receiving the resources they need in conjunction with the value options in job satisfaction. There were outside variables which made this difficult to drill down into specifics related to training, such as types, learning styles, and application. There are subsets of employees who receive required training based on their position, which can vary within the ranks of occupational status. For instance, certified professional engineers are required to complete 24 professional development hours every other year. Tech service employees must complete departmental safety training, and also job specific training annually. There are many opportunities here to drill down further to truly understand the meanings behind the training perceptions of each occupational status level. It would also be advantageous to gain data from Penn State University on the in-house training delivered to all personnel.

Future Research

Some facets of this study are worth exploring further at Penn State. Research conducted in this study indicated the variables of interest could be expanded to provide more precise data. Of those variables, job training satisfaction and perceived organizational support may hold a wealth of untapped information, especially if measured against outcome variables like employee commitment, engagement, and turnover intentions. The strong influences seen from perceived organizational support could be further explored by attempting to discern the antecedents and outcomes related to the social exchange created by a strong perception of the organization's investment in the employee.

Based on the Likert responses, more research into the disparity of the data, especially those which created a pattern by occupational status, would be of great interest. Structured focus groups would allow greater depth of data collection, while a more pointed survey would provide confidentiality necessary to garner responses to potentially sensitive questions. One such area of study may be created to explore the variables associated with the reduced satisfaction with job training seen in manager and directors at Penn State—again displayed in Appendix D.

Other aspects in which research might be conducted is to further discover the relationships of the variables of interest with data Penn State is currently collecting. For instance, research questions posed may ask what the turnover rate is for those hired outside of central PA, and if that rate is positively or negatively related to job satisfaction, or perceived organizational support. It would then be prudent to determine if that same population currently employed at the university had strong social support, and perceived organizational support. A similar study could be conducted in a more urban area with a greater diversity and variance in the population.

In any iteration of study relating to job satisfaction, job training satisfaction, and perceived organizational support, it goes without saying the survey model (if a survey is used)

should be expanded to include a lengthened collection of values in which to relate satisfaction. Additionally, separate instruments designed specifically for the audience could collect more intuitive data. Using technical service employees as an example, a tailored instrument could help account for contributing variables such as those dictated by the union agreement—which directly affect salary increases, promotions, training, and the ability to change career paths.

Human resource data, which was unavailable for this study, would be extremely helpful in the ability to tie in further outcomes and satisfaction values. One such model might query employees on their valued rewards, such as financial, work/life balance, and upward mobility. Those rewards might then be tied to data collected from the university which captures performance reviews, salary increases, and position changes. Turnover intent might also be collected through the university's job posting system, which can track a person's applications to positions over time.

Conclusions

Conducting a survey for the first time is truly a learning experience. Even with piloting, data testing, formal education, and personal research, there is still nothing like the actual practice. One potential purpose of this particular study was to find if there were any inequities between occupational status and the three variables of interest, but the instrument became too generalized in order to suit the distribution to all staff employees. As noted in future research, a separate survey for technical employees may have produced results more tailored to that group.

This study did not explore performance indicators or outcomes, although the research reviewed here does elaborate on those concepts, unfortunately, there are no studies found which directly resemble the personnel surveyed in this study.

There is data collected here which is useful to Penn State and might also be used for further study. One example might be another study expanding on this one. While the researcher does not have access to the contact information as linked to the specific responses of those who responded to the JTSS, the participant's emails are captured within Qualtrics. A longitudinal study expanding on the variables captured here could provide the university with metrics to investigate job satisfaction over time, and the variables which contribute to the raising or lowering of satisfaction.

This study indicated the control variables were mostly inconclusive, but still provide interesting relationship data which created small, but useful patterns. These patterns are worth further investigation to rule out contributing variables, and to determine what growth can be achieved within the University based on those findings. As a study which has not been previously conducted, this may be a good foundation upon which to build.

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Appendix A

Penn State University Salary Bands



Staff Salary Bands

Effective July 1, 2015

Salary Band	Minimum	Midpoint	Maximum
A	\$16,104	\$23,748	\$31,392
B	\$17,712	\$26,124	\$34,524
C	\$19,152	\$28,728	\$38,304
D	\$21,072	\$31,620	\$42,156
E	\$23,604	\$35,400	\$47,196
F	\$26,436	\$39,660	\$52,872
G	\$29,136	\$44,412	\$59,712
H	\$33,192	\$50,616	\$68,040
I	\$37,848	\$57,696	\$77,580
J	\$42,444	\$65,772	\$89,136
K	\$49,236	\$76,308	\$103,392
L	\$57,120	\$88,524	\$119,928
M	\$66,240	\$102,672	\$139,116
N	\$78,168	\$121,152	\$164,148
O	\$90,768	\$142,968	\$195,168
P	\$107,124	\$168,696	\$230,280

**These salary bands have been established to provide guidelines for staff positions. There may be business circumstances which require establishment of salaries outside of the guidelines. In those circumstances, Compensation & Classification will be consulted.

Appendix B

Penn State University Job Profile Example

LEVEL 3

LEVEL DETAILS

Job Code	Salary Band	FLSA Status
ACBU0103	I	Exempt

Level 3 positions typically demonstrate proficient and comprehensive knowledge of defined skill areas/applications to integrate fundamental elements from other specialties into work assignments; apply knowledge of principles, practices, and procedures of a particular field of specialization to complete difficult assignments; promote a culture that is conducive to effective relationships among diverse team members; ensure safe practices and environmental consciousness are exhibited in decisions; may lead a project team involved in completion of difficult assignments, requiring proficient knowledge of field of specialization; interpret and communicate information, ideas and instructions clearly, accurately and persuasively both verbally and in writing including materials intended for distribution; incorporate new facts and ideas into group processes and apply creative thinking to develop new solutions; typically work with minimal supervision on difficult assignments, conferring with manager on unusual matters.

TYPICAL EDUCATION & EXPERIENCE

3+ years related experience
 Bachelor's Degree or higher
Or an equivalent combination of education and experience

TYPICAL WORK DUTIES

- Interpret and explain procedures, forms, formats, definitions and other requirements for the annual preparation and submission of budget documents
- Review and verify annual University-wide salary increases and promotion allocations
- Assist in the development of detailed income projections
- Participate in budget and resource data analysis; gather, compile and manipulate data; may determine analytical methods to be used; identify inconsistencies or significant findings
- May develop and analyze projections of the budget and resource implications of proposed programs; may act as departmental liaison and assist in resolving problems
- Prepare detailed presentations of comprehensive materials
- Participate in the preparation of comparative and historical analysis
- May develop and maintain written departmental procedures, training guides and information
- Prepare graphs, charts, etc., for presentations
- May create and maintain databases
- Conduct assigned research and assist in the preparation of data analysis and position papers
- Participate in the design and implementation of computer systems
- Assist in the preparation of annual appropriation and capital program requests to the Commonwealth; prepare related summaries, analysis and other background materials
- Research and assist in the preparation of materials for use by the senior executives or for mandated reports required by the Commonwealth
- Prepare comparative and historical analysis of appropriate indicator data in support of the University's annual budget review
- Assist in analyzing and/or developing projections of cost and other resource implications of proposed academic or support programs and changes in programs
- Coordinate work assignments and train assigned staff

This profile is intended to indicate the kinds of tasks and levels of work difficulty that will be required of positions in this job title and should not be construed as declaring what the specific duties and responsibilities of any particular position shall be. It is not intended to limit or in any way modify the right of any supervisor to assign, direct, and control the work of employees under his/her supervision. The use of a particular expression or illustration describing duties should not be held to exclude other duties not mentioned that are of a similar kind or level of difficulty.

Appendix C

Job Training Satisfaction Survey

Q1. This research is strictly confidential.

This research is considered confidential. The researcher may not disclose or use information or documents that may identify you. Information is not captured in such a way that your identity might be determined by reviewing the resulting data, nor are there any pathways to identification available. Your information and responses are confidential. No party external to this research will see your responses, nor will any information be shared about your participation.

- I choose **to participate** to gain entry into prize drawings
- I choose **NOT** to participate in this survey

Q2. Please provide your PSU email address (xyz123@psu.edu) to participate in prize drawings. (only available on paper surveys)

The following demographic information is used to analyze data and to ensure that employees are represented fairly in the results.

Q3. What is your age?

- Under 18
- 19-24
- 25-34
- 35-44
- 45-54
- 55 or older

Q4. Are you currently located at the University Park campus? (Do you work at UP?)

Yes

No

Q5. Which role best describes your employment at Penn State University--University Park?

Administrative (Provost, Dean, President)

Faculty

Staff

Tech Service

Volunteer/Intern (paid or unpaid) or Post-doctoral

Work Study Student

Student

Q6. Please enter your Job Title or Job Code/Grade here.

Q7. What is the highest level of school you have completed or the highest degree you have received?

Less than high school degree

High school graduate (high school diploma or equivalent including GED)

Some college or currently attending

Associate degree or certification (2-year)

Bachelor's degree (4-year)

Master's degree

Doctoral degree or Professional degree (PhD, JD, MD)

Q8. Are you Spanish, Hispanic, or Latino or none of these?

Yes

None of these

Q9. Choose one or more races that you consider yourself to be:

White

Black or African American

American Indian or Alaska Native

Asian

Native Hawaiian or Pacific Islander

Other _____

Q10. What is your gender?

Male

Female

Non-binary/third gender

Prefer to self-describe _____

Prefer not to say

Q11. How long have you been in your current role at the University?

- Less than 1 year
- 1-2 years
- 2-4 years
- 5 or more years

Q12. **In the last year**, how many **hours** have you spent in employer-provided (in-house) training, online training, training at an outside facility, and any conferences?

Example: Two full days at food safety training = 16 hours.

Example: Four sessions at four hours per session for leadership training = 16 hours

Example: Online mandated reporter training = 1.5 hours (your time may vary)

Employer-provided (in-house)—hours spent over the last year:	
Online training—hours spent over the last year:	
Outside training (specific short training modules-not conferences)—hours spent:	
Conferences (total conference time in hours):	
I'm not sure, but I estimate total hours last year were:	

The following questions are in reference to the department in which you work. Consider your responses related to your *department*, where you would have the best chance to gain feedback.

Q13. I feel that my department:

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
finds me valuable in my current position	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
cares about my general satisfaction at work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
provides me with enough training to do my job well	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
is interested in my personal and professional development	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
plans learning that is purposeful rather than accidental	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

This next section is about your current immediate supervisor. This is the person you report to and who evaluates your work and performance.

Q14. I feel that my supervisor:

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
makes sure I have training goals to achieve	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
cares about my general satisfaction at work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
wants me to succeed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
is interested in my personal and professional development	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
feels training is important	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
supports my need to balance work and other life issues	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The section that follows is devoted to the training you have received over the last year and how you feel about that received training.

Q15. Training I have received over the last year:

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
is applicable to my current job	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
is applicable to my career goals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
meets my needs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
is provided to help me gain new skills or increase my current skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
is something that I applied to my current job	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q16. I deliberately seek out training opportunities rather than waiting to be sent to training.

- Strongly disagree
- Somewhat disagree
- Neither agree nor disagree
- Somewhat agree
- Strongly agree

Q17. I have training goals designed to enhance my current work assignment and to prepare me for future positions

- Strongly disagree
- Somewhat disagree
- Neither agree nor disagree
- Somewhat agree
- Strongly agree

The questions below pertain to you and your current job. When answering, think about your experiences, and how you feel about your position.

Q18. In my current position:

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
I feel like what I'm doing is worthwhile	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My job is important to me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
I will be recognized for a job well done	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
doing my job well gives me a good feeling.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am happy in what I am doing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

This final section will simply ask you about your overall feelings of satisfaction.

Q19. Overall:

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
I am satisfied with the training I have been provided.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am satisfied with the support I receive from my supervisor.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am satisfied with the support I receive from my organization.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am satisfied with my position.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Appendix D

Responses³ of Variables of Interest by Occupational Status⁴

Table 9. Survey response means by job satisfaction and occupational status (n = 2,051)

	Occupational Status					Total
	Executive	Managers & Directors	Supervisors & Staff	Clerical & Support	Technical Service	
JS1: Department: finds me valuable in my current position	4.43	4.24	4.10	4.11	3.78	4.08
JS2: Department: Cares about my general satisfaction at work	4.14	3.82	3.75	3.78	3.45	3.73
JS3: Department: is Interested in my personal and professional development	4.33	3.62	3.62	3.64	3.10	3.57
JS4: Supervisor: Cares about my general satisfaction at work	4.33	4.10	4.02	4.01	3.78	4.00
JS5: Supervisor: Wants me to succeed	4.62	4.38	4.31	4.28	3.96	4.27
JS6: Supervisor: Supports my need to balance work and other life issues	4.29	4.27	4.25	4.22	3.71	4.18
JS7: In my current position: I feel like what I'm doing is worthwhile	4.67	4.44	4.28	4.10	3.96	4.22
JS8: Overall: I am satisfied with my position	4.29	3.90	3.75	3.73	3.74	3.77
JS9: In my current position: My job is important to me	4.81	4.64	4.53	4.39	4.54	4.52
JS10: In my current position: I will be recognized for a job well done	4.10	3.55	3.51	3.63	3.34	3.53
JS11: In my current position: Doing my job well gives me a good feeling	4.81	4.67	4.59	4.54	4.43	4.57
JS12: In my current position: I am happy in what I am doing	4.38	4.09	3.98	3.90	3.88	3.97

Notes: Means of interest (> 0.25 from next highest rank) are in bold.

Table 10. Survey response means by job training satisfaction and occupational status (n = 2,051)

	Occupational Status					Total
	Executive	Managers & Directors	Supervisors & Staff	Clerical & Support	Technical Service	
JTS1: Training I have received: is applicable to my current job	4.43	4.11	4.10	4.12	3.65	4.05
JTS2: Training I have received: is applicable to my career goals	4.00	3.65	3.70	3.71	3.11	3.63

³ Responses gathered in a five point Likert scale.

⁴ Control variables of gender, age, educational attainment, and racial identity displayed no disparity in means \leq or \geq 0.25.

	Occupational Status					Total
	Executive	Managers & Directors	Supervisors & Staff	Clerical & Support	Technical Service	
JTS3: Training I have received: meets my needs	3.71	3.68	3.60	3.70	3.26	3.59
JTS4: Training I have received: is provided to help me gain new skills or increase my current skills	4.00	3.72	3.79	3.87	3.10	3.72
JTS5: Training I have received: is something that I applied to my current job	4.19	3.99	3.94	4.00	3.50	3.91
JTS6: Overall: I am satisfied with the training I have been provided	3.62	3.48	3.51	3.61	3.24	3.50

Notes: Means of interest (> 0.25 from next highest rank) are in bold.

Table 11. *Survey response means by perceived organizational support and occupational status (n = 2,051)*

	Occupational Status					Total
	Executive	Managers & Directors	Supervisors & Staff	Clerical & Support	Technical Service	
POS1: Department: Provides me with enough training to do my job well	4.05	3.66	3.68	3.73	3.65	3.69
POS2: Department: Plans learning that is purposeful rather than accidental	3.67	3.19	3.37	3.44	3.21	3.35
POS3: Supervisor: Makes sure I have training goals to achieve	3.76	3.63	3.78	3.89	3.62	3.77
POS4: Supervisor: Is interested in my personal and professional development	4.48	3.94	3.92	3.93	3.51	3.88
POS5: Supervisor: Feels training is important	4.19	3.92	3.96	3.98	3.91	3.96
POS6: Overall: I am satisfied with the support I receive from my supervisor	4.43	4.04	3.96	3.97	3.73	3.95
POS7: Overall: I am satisfied with the support I receive from my organization	4.10	3.55	3.44	3.57	3.25	3.47

Notes: Means of interest (> 0.25 from next highest rank) are in bold.

VITA

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Thesis: “The Application and Use of Training across Platforms: A Study of Behavioral Change”

Ellis University, Rochester, NY

B.A. English Language and Literature (Honors) 2009

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Penn State University, University Park, PA

Associate Director, Talent Search/EOC Programs, Educational Equity 2014—Present

Administration and facilitation of four ED TRIO grants.

Learning Partner—Center for Workplace Learning & Performance 2014—Present

Provide university-wide leadership, communication, and team building training to employees.

Education Program Associate 2010—2014

Strategic planning for employee curricular programs and apprenticeship programs.

Sares-Regis Group, Irvine, CA

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Coordinated, analyzed, and delivered all facets of employee education.

Quest Software, Irvine, CA

User Experience/Client Care Coordinator 1997 – 2002

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