DISSERTATION

DEVELOPMENT OF THE STUDENT AFFAIRS OFFICERS WORK ENVIRONMENT PERCEPTION SCALE

Submitted by

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WE HEREBY RECOMMEND THAT THE DISSERTATION PREPARED UNDER OUR SUPERVISION BY DERRICK E. HAYNES ENTITLED DEVELOPMENT OF THE STUDENT AFFAIRS OFFICERS WORK ENVIRONMENT PERCEPTION SCALE BE ACCEPTED AS FULFILLING IN PART REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY.

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ABSTRACT OF DISSERTATION

DEVELOPMENT OF THE STUDENT AFFAIRS OFFICERS WORK ENVIRONMENT PERCEPTION SCALE

The qualitative and quantitative study developed and validated a questionnaire to measure Student Affairs Officers' (SAO) perceptions of the work environment. A review of the literature identified five major categories and 25 elements having an impact on SAOs' perceptions of the work environment. The test instrument (questionnaire) was developed through a focus group informed by the literature with Student Affairs Leaders (SAL). The process yielded a test instrument with 125 items.

During February 2010, 1,723 SAOs who are members of Student Affairs Administrators in Higher Education (NASPA) were invited to respond to the Student Affairs Officers Work Environment Perception Scale (SAOWEPS) questionnaire. Of those invited, 702 SAOs responded, yielding a 41% response rate. SAOWEPS was administered online using SurveyMonkey. Exploratory factor analysis (EFA) was conducted to analyze data. EFA identified five factors (relationship between SAL/SAO, job design and ability to do the work, job engagement and satisfaction, workgroup effectiveness, and organizational climate and commitment). In addition, the items were reduced from 125 to 59. The Cronhach's alpha of .962 was found for the 59 items and these items account for 52.3% of the variance with five factors.

Data from the validated questionnaire was analyzed to determine if differences between work environment perceptions exist for SAOs who have 1-4 years (n = 215) and 5 or more years of experience (n = 487). An independent samples t test was conducted with the two groups and no significance was found. The researcher then split the two groups into three groups (SAOs with 1-4 years of experience, n = 215 (M = 41.12, SD = 11.90), for SAOs with 5-10 years of experience, n = 322 (M = 43.33, SD = 12.30), and n = 165 (M = 42.55, SD = 12.40) for SAOs with 11+ years of experience) and conducted a one-way ANOVA to see if differences existed. However no significant differences were found.

The outcome of the study developed and validated a questionnaire, which measures SAOs' perceptions of the work environment. The questionnaire is useful as it provides SALs with a way to assess a student affairs department or division. Ultimately, SAOWEPS provides insight into the work environment as perceived by SAOs.

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DEDICATION

I want to dedicate this dissertation to all Student Affairs Professionals who endeavor to help students be the best they can be! It is an honor to have the ability to participate in the growth process of others!

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CHAPTER 1: INTRODUCTION

Traditionally Student Affairs (SA) is responsible for administrative and support aspects in institutions of higher education by contributing to holistic development of students with opportunities for their growth and development outside of the classroom (Bess & Dee, 2008). Given this challenge, many SA personnel view their role as teachers, while others see themselves as providers of "excellent services to students" (Keeling, 2006). Regardless of the perspective (teacher or service provider), SA personnel view themselves as highly trained professionals (Sandeen, 2000). It is from this perspective that SA personnel contribute to the success of students in higher education. Furthermore, many SA personnel take great pride in providing services and developing programming to encourage students to become involved in the greater college experience (Cuyjet, 1997). Overall, SA personnel make great contributions to the success of students and the goals/mission of an institution (college or university).

To understand the unique role of SA, it is necessary to understand how it is structured and organized in institutions of higher education. SA leadership structure represents the personnel who are responsible for (a) ensuring the strategic goals and objectives of the institution are being met, (b) supervision of subordinates, (c) oversight of budgets, and (d) management of programs (Fortunato, 1981). These leaders are responsible for major SA functions ranging from enrollment management to housing to student life (Bess & Dee, 2008). Combined, these functions represent the institutional

administrative support structure, which focus on developing students experiences outside the classroom. This administrative structure is referred to as a SA division. For the purposes of this study, leaders of the SA division will be called Student Affairs Leaders (SALs).

The structure of the SA division is critical to the institutions' ability to serve students. Figure 1 provides a visual representation of the common components in a SA organizational structure. The SA division is led by the chief student affairs leader (CSAL) often known as a vice president/chancellor. The vice president/chancellor usually reports directly to the president or chief academic officer (provost). The vice president/ chancellor has one or more associate/assistant vice presidents or deans reporting to him/her. This layer of personnel assists the vice president/chancellor with the division of labor in relationship to the work performed in the division. This division is usually segmented into subsections overseeing functions such as enrollment, housing, and student life, although these areas may vary from institution-to-institution. The subsections are formed though a grouping of departments. For example a student life subsection may include student activities, career services, and Greek life. Departments in each subsection are headed by directors. Directors report to associate/assistant vice presidents or deans and oversee departments such as Admissions, Financial Aid, Student Activities, etc. For the purpose of this study, these three levels represent the leadership component of the SA division. The SA leadership component is defined as the Student Affairs Leadership/ Leaders (SAL). Within the departmental structure, under the director are the reports (personnel) responsible for providing direct support services to students. This level of personnel represents Student Affairs Officers (SAO). SAOs are usually responsible for

developing programming for students, supervising student and professional staff, and facilitating activities that support student success.

Given the complexities of roles and organizational structures, the potential for performance issues is possible. This potential is based on distinct roles and levels of the groups. Varying job duties and approaches to administrative support can provide disconnects between the SALs and SAOs. According to Rummler personnel who have varying levels of responsibility within an organization can lead to potential for problems in the work environment (2007). These problems include relationship between SAL/SAO, job design, institutional structure, and perceptions of the work environment and workgroup and can ultimately lead to issues with performance around the development of work related perceptions. Although performance is a broad subject, the literature suggests perceptions of the work environment are closely tied to performance problems (Winston & Creamer, 1998). The study focuses on developing a questionnaire to measure SAOs perceptions of the work environment.

Research Problem

Preparation for the proposed study was challenging due to the lack of literature specific to SAOs perceptions of the work environment. This caused the researcher to look at the related SA literature from a broad perspective to make connections to the study. The review uncovered gaps and major issues to include SAOs expectations of SALs supervision and SALs challenges supervising SAOs. These two issues represent tensions in the field, which contribute to how SAOs develop perceptions of the work environment.

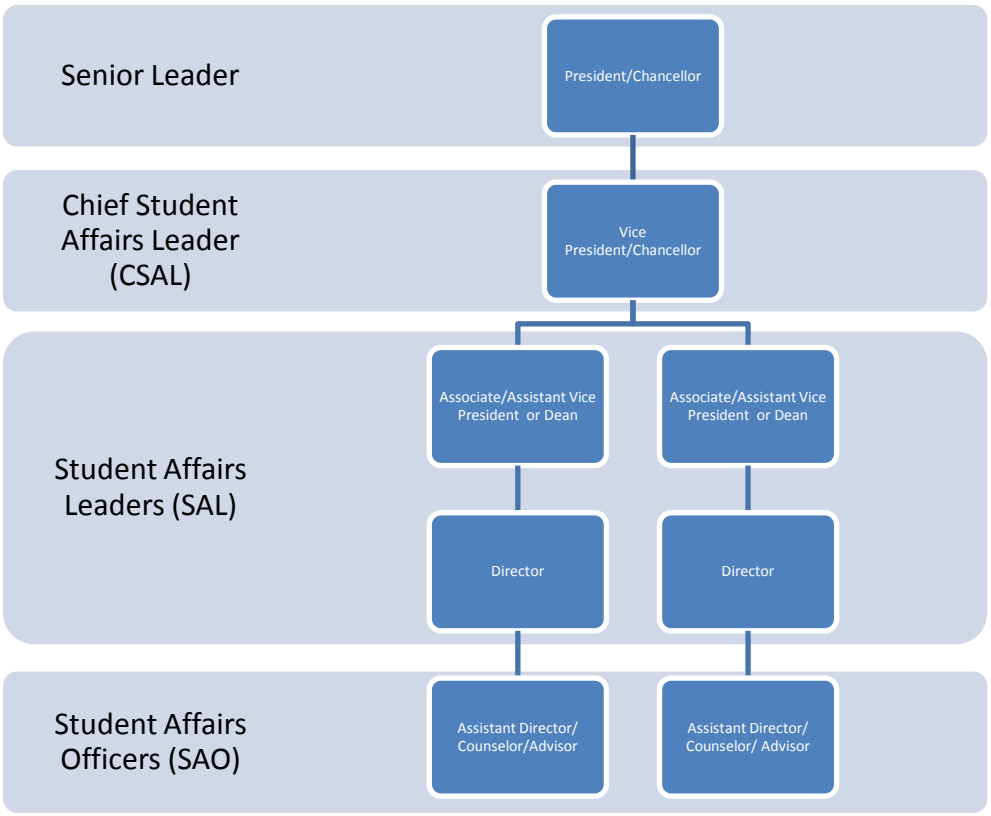

Figure 1. Common Organizational Chart for Student Affairs

Student Affairs Officers' Expectations

Within the field of Student Affairs, SAOs represent 15-20% of the entire SA workforce who has between one and five years of experience (Cilente, Henning, Skinner, Kennedy, & Sloan, 2006). The rest of the field is filled with personnel (SALs and SAOs) who hold leadership positions or are officers who have worked in the field for more than five years. Within the first five years of employment, 50% to 60% of SAOs make their decisions whether to maintain a career within the field (Tull, 2006). The literature suggests SAOs decide to leave their jobs soon after being hired based on perceptions of the work environment (Burkard, Cole, Ott, & Stoflet, 2005). Other studies note that SAOs either flourish or decide to leave their jobs based on the lack of quality supervision

provided by SALs (Guanci, 2008; Hart, 2005; Shriver & Re, 2006; Turner & Rimanoczy, 2008). Thus, supervision plays a role in the development of perceptions.

Many SAOs have displayed dissatisfaction with the level of supervision received after starting to work in the field. SAOs coming from graduate programs have become accustomed to receiving constant feedback and supervision as a part of their program and internships or assistantships. Due to this, Shupp (2007) explains new SAOs desire to have more interactions with SALs. The study noted many instances where various SAOs voiced concern with the lack of supervision received (Shupp, 2007). The lack of quality supervision leads to frustration and the development of negative perceptions (Guido-DiBrito, 1995). This notion is supported by a report developed by the American College Personnel Association (ACPA), which argued new SAOs supervision "appeared to be lacking" (Cilente et al., 2006, p. 18). Thus the issue of supervisory expectations is important as many SAOs expect to receive guidance from SALs. SAOs expectations of the work environment are equally as important as the SALs ability to contribute to the supervisory relationship.

Student Affairs Leaders and Supervision

One of the primary roles of SALs is to supervise staff. The SA literature suggests many SALs face challenges with their ability to lead SAOs. According to Harned and Murphy (1998), many SALs are "ill prepared" to perform supervisory tasks. This is due to a lack of importance placed on the development of supervisory skills for SALs in the field of SA (Elder, 1999; Willimon, 1997). This becomes problematic when SALs are expected to effectively manage programs, departments, and divisions that meet the strategic needs of the institution. Shupp (2007) explains many SALs are often too busy to

provide supervision to SAOs. The overall lack of supervision represents negligent leadership (Wilson, 2007). This is also known as managerial malpractice (Gilley & Maycunich, 2000). Given the issue of negligence and malpractice, it is necessary for SALs to participate in activities to develop their supervisory skills.

The SA literature did not yield many studies and articles related to the supervisory abilities or competencies for SALs (Dalton, 1996; Ignelzi, 1998). This gap suggests supervisory development of SALs is not a highly important issue in both the theory and practice domains of SA. Many major SA focused professional organizations, such as College Student Educators International (ACPA) and Student Affairs Administrators in Higher Education (NASPA), provide mid-level and senior leader institutes. However, many institutes only occur once or twice a year and are limited in the numbers of professionals who can or may attend. In addition, many institutions do not provide organized human resource development training activities specifically designed to increase supervisory skills (Janosik, Creamer, Winston, & Kuk, 2001). Combined, this highlights a tension in the field, as SALs who have the ultimate responsibility for supervising SAOs face challenges with one of their most important duties.

The two major tensions in the field of SA (SAO's expectations and SALs supervisory abilities) point to critical areas where problems in the work environment exist. The gap becomes problematic as a threat to the retention of SAOs, SALs ability to achieve high quality performance from SAOs, and the SALs' ability to support the overall mission of the institution. Ultimately the combination of these issues influence the way SAOs perceive and work within the work environment.

The literature has identified perceptions as a major component of the work environment. Perceptions are influenced by the tensions around SAOs' expectations and supervisory abilities of SALs. To that end, the work environment holds many issues, which influence perceptions and ultimately impact the performance of SAOs. These perceptions often revolve around intrinsic and extrinsic stimulus in the work environment. Intrinsic issues or categories of the work environment include (a) perceptions of the institutional culture and commitment (to the job) and (b) SAOs perceptions of fit with the workgroup. Extrinsic issues or categories include (a) relationship between the SAL and SAO (b) job design and ability to do the work, and (c) organizational structure defining the work and provide insights into the perceived aspects of the work environment from an external perspective. When both categories are combined (intrinsic and extrinsic), it is possible to understand the work environment from a holistic perspective. Such a holistic understanding can inform understanding of how performance of SAOs is affected.

Significance of the Study

From an effective leadership perspective, SALs must have an informed understanding of the perceived work environment. This allows SALs to make changes to their leadership approach and the work environment to effectively meet the needs of SAOs and foster optimal performance. For example, if SALs know of a perceived problem with the level of communication occurring within a unit, they can use this information (to take action) and assess the amount of quality communication in their department/division. Information gained from this process can lead to a positive influence on perceptions and ultimately improve the work environment yielding improved

performance. This study provides SALs with a questionnaire empowering them to become a more effective leader by understanding the work environment from the perspectives of the SAOs. In essence, the questionnaire provides SALs with an accurate "pulse" of the work environment.

The study develops and utilizes a questionnaire to measure perceptions of the Student Affairs Officers (SAO). The idea behind the questionnaire is influenced by the notion that SALs have challenges in their abilities to understand the work environment from the perspective of SAOs. Given the complexities of human behavior and how it is influenced by the power held by SALs, it is sometimes hard to gain honest and meaningful feedback from employees. For example, if a SAL was to ask a SAO how he/she perceived the work environment, one of two answers may be given. Each of the answers could be impacted by the power and authority held by the SAL. The first response may be a generally positive statement; "everything is great." Although this answer may be honest, there is a possibility that the SAO is responding this way based on the power and influence held by the SAL. The SAO may choose to avoid negative feedback because he/she has a fear of retribution or is intimidated by the SAL. Given the impact of power and influence responses may be presented in a complementary way and intended to positively stroke the SAL's ego: "this place is great because you are a good boss." The other side of this issue is the notion of the response being presented in an honest and constructive way. The second response may be; "I don't like working here, because I feel my leadership is not supportive of the work I do." Although this example is intended to be honest and constructive, the negative answer can potentially lead to

negative consequences for SAOs. In this case, the issue of power and influence did not negatively impact the way this question was answered.

It is important to understand that sometimes human behavior dictates the way questions are answered. Due to this, it is often challenging for SAOs to effectively communicate the way they perceive the work environment, given the impact of issues around power and influence. To that end, SALs who desire to receive honest feedback about the work environment face challenges. This highlights the need for this study. Thus the study becomes significant as the questionnaire provides SAOs with a non-threatening way to express their perceptions of the work environment without being influenced by the power and influence held by SALs'.

Purpose and Research Questions

The goal of the study is to develop a questionnaire to measure perceptions of SAOs in relationship to their work environment. The following research questions are used to develop and validate the Student Affairs Officer Work Environment Perception Scale (SAOWEPS).

1. What are the categories and elements, which should be included in a questionnaire measuring Student Affairs Officers' perceptions of the work environment?
2. To what extent is the SAOWEPS questionnaire valid?
3. To what extent is the SAOWEPS questionnaire reliable?
4. Based on the validated questionnaire, is there a difference in work environment perceptions between employees who have one to four years of

work experience versus those who have five or more years experience in the field?

The researcher used a mixed methods approach to answer the research question. The literature was reviewed to identify the issues impacting perceptions and performance of SAOs. A focus group and interviews with SALs (informed by the review), were conducted to develop items for the questionnaire. The questionnaire was administered online and validated using Exploratory Factor Analysis. The final research question was answered based on data from the validated questionnaire.

Definition of Terms

This section provides operational definitions of the terms to be used in this study.

Department. Within SA, a department consists of a grouping of job tasks and professionals serving a specific purpose. A department is supervised by a director who oversees the tasks related to the department's purpose. For example a SA admissions department is responsible for recruiting and admitting students.

Division. A division is a collection of SA departments supervised by a CSAL.

Extrinsic Categories. These categories represent various characteristics of the work environment out of control of SAOs. Extrinsic Categories include (a) relationship between the SAO and SAL, (b) design of the job and ability to perform the work, and (c) institutional structure that defines the work environment.

Intrinsic Categories. Intrinsic Categories represent personal judgments made by the SAO about their work environment. Intrinsic Categories include (a) perception of institutional culture and commitment and (b) perception of fit with the workgroup.

Institution. The role and function of institutions of higher education (colleges and universities) are to foster the academic and social growth of students from a holistic perspective. For the purpose of this study, the term college and university refers to institutions as each uses the term in their institutions name.

Performance. Performance is the quality of an output produced by a performer. In many cases, outputs are related to specific job duties and tasks (Stolovitch & Keeps, 2004). Performance is measured by preset standards for the level of produced outputs performed.

Perception. Judgments are made by SAO in relationship to the work environment. These judgments are based on individual subjective perceptions.

Student Affairs Leader (SAL). The management structure of SA consists of SALs (Sandeen, 1991). They are responsible for the oversight of departments, programs, and multiple organizational processes within a division of SA. These leaders are responsible for connecting the initiatives of the institution with entry level personnel who perform tasks (Young & Elfrink, 1991). For this study individuals defined as SALs hold titles of Director, Assistant/Associate Dean, Dean, Associate Vice President/Chancellor, and Vice President/Chancellor. Such leaders are known as the middle and senior leadership within the field of Student Affairs.

Student Affairs Officer (SAO). The Student Affairs Officer is responsible for the performance of specific tasks related to a job function (Rummler, 2007). In most cases the SAO is responsible for providing services to students, developing and delivering programming, and providing other direct services that support the development and growth of students outside of the classroom. Some SAOs

supervise students, professional staff, and oversee budgets, however as a general rule, they are not responsible for the oversight responsibilities of a department. The individuals defined as SAOs hold titles and ranks of Advisor, Counselor, Coordinator, Specialist and Assistant/Associate Director.

Work Environment. The work environment pertains to everything within an organization (Rothwell, 1996), linking to an employee.

Delimitations

The dissertation is framed around the perceptions of SAOs in higher education settings. This study samples SAOs from across the United States including Puerto Rico. The participants come from community colleges, colleges, and universities who receive state appropriated funds and private donations. SAOs from the "for profit" sector of higher education are excluded from this study. Although important, foreign schools are not analyzed.

Assumptions and Limitations

This study is based on various assumptions. The first assumption is within the field of Student Affairs, perceptions of the work environment impact performance. It is assumed SALs often misunderstand the work environment as perceived by SAOs. The next assumption is SAOs who participated in this study responded to the items honestly, thus yielding adequate data. Another assumption is SAOs know enough about their work environment to adequately answer the questionnaire items. In some cases, SAOs who have many years of experience in the field may not be able to clearly articulate their understanding of the work environment, as they have focused more on performing job duties, rather than looking at things from a broader perspective. Additional limitations are

discussed in chapter 3. Given these limitation, the researcher thinks that the study will produce a quality questionnaire to measure perceptions of the work environment.

Researcher's Perspective

The researcher has 12 years or progressively responsible leadership experience in the field of Student Affairs. Currently, the researcher serves as a SAL at a large university in the state of Colorado. Within the next five years, the researcher plans to seek a CSAL position. Since 2003, the researcher has been exposed to the field of Strategic Human Resource Development (SHRD). This has influenced views of institutional effectiveness (performance) and development (learning) and continuous improvement (change). The domains of Organizational Learning, Performance and Change (OLPC) have encouraged the development of a change agent perspective for the researcher. This has influenced the work performed by the researcher.

Given the future plans of the researcher and the influences of OLPC, the study hopes to contribute to the field. The ultimate goal of the researcher is to blend the practices of OLPC into the SA environment to support the development of a stronger field. The researcher believes a questionnaire measuring perceptions will empower SALs to better understand the needs of SAOs, thus being more effective leaders. This perspective is what is motivating the researcher to complete this study.

CHAPTER 2: LITERATURE REVIEW

Gilbert K. Chesterton said, "it's not that they cannot see the solution, they cannot see the problem" (Straker & Rawlinson, 2003). This statement embodies the challenges SALs face on a daily basis when attempting to understand the performance displayed by SAOs. On one hand, SAO's personal thoughts about the organizational climate and relationships with coworkers impact the way job duties are performed. A critical component of the SAOs work environment includes navigating the institutional culture and working closely with coworkers. Both of these components impact SAOs ability to effectively serve students and successfully complete job tasks. On the other hand, SAOs develop perceptions about the work environment influenced by external stimuli and internal thinking. A normal work day for SAOs includes navigating complex institutional structures to perform job duties. Many SAOs work closely with students providing services and overseeing processes that impact students' success. To be successful on the job SAOs work closely with their workgroup and SALs within the work environment. As a result of the work performed by SAOs, when stimuli, thoughts, and perceptions are merged, a behavioral outcome is produced. Specifically this behavioral outcome can be observed as a level of job performance. This becomes important to SALs as they are interested in optimizing the performance of SAOs for the purpose of meeting departmental and institutional goals. Therefore, it is necessary for SALs to find a way to better understand SAOs' perceptions of the work environment.

Currently there are limited ways to measure how SAOs perceive the work environment. In addition, issues such as power and influence held by SALs, hinders them

from receiving honest and meaningful feedback from SAOs, creating tension. This tension creates a challenge as SALs are unable to understand the work environment. The study addresses this tension as it will yield a validated questionnaire to measure SAOs perceptions of their work environment.

To effectively develop such a questionnaire, a review of the literature was conducted to identify the categories and elements to be used. The review sought to answer the following question.

1. What constructs should be included in a questionnaire measuring Student Affairs Officers' perceptions of their work environment?

The review develops a conceptual framework and synthesizes empirical literature to identify what is relevant to the field of Student Affairs (SA) and the study. These outline the various aspects of the Student Affairs work environment. Each element and category uniquely describes the work experience of SAOs. The following sections outline how literature supports each of the constructs.

Perceptions of the Work Environment

Student Affairs Officers (SAO) play critical roles in the lives of college students. These roles involve being teachers (McGuire & Phye, 2006) responsible for assisting students to grow outside of the classroom. Given the diverse job duties SAOs perform, it is reasonable to assume each views the job and the work environment differently. It is also reasonable to assume views differ among SAOs in the same department and SA division. For example, four SAOs from a specific department, who perform different jobs for the same SAL, may perceive the work environment differently. Perceptions are individual in nature and unique to each SAO. These perceptions ultimately determine

how SAOs interact with the job and work environment. For the purpose of this study, perceptions are defined as a cognitive response to stimuli (from the environment) that lead to an outcome (performing job duties). Simply put, cognitive responses are composed of a series of judgments leading to a perception of the environment (Gilmer, 1961). For example, a new financial aid officer who has a number of negative interactions with colleagues may conclude the work environment is not welcoming. The development of perceptions involves SAOs choosing which inputs are associated with a behavior (Champoux, 1996). Given the complexity of how perceptions are developed, it is necessary to examine how perceptions are formed.

Perception Development

Early studies examined how perceptions are developed. For example, a number of studies examined perceptions of youth and adults related to performing tasks, parenting, moral judgment, and artistic expression of children (Anderson, 1946; Hurlock & Thomson, 1934; Postman & Solomon, 1950; Seeman, 1947). Although many of the findings were similar, few studies examined the constructs of perceptions within a work environment. In the 1950s, two studies merged the examination of perceptions in the work environment (Bumagin, 1953; Matarazzo, Watson, & Ulett, 1952). Although these studies are more than 50 years old, they provide an empirical foundation for the study of perceptions. These studies developed the notion that perceptions are generally formed from previously learned events (Andrew, Farhall, Ong, & Waddell, 2009). Zaporozhets (2002) argued if one does not have a frame of reference from which to make a judgment, a perception is not formed. This notion also works in converse; prior experiences tend to be associated with perceptions.

After an exhaustive search of many databases associated with psychology, business, and sociology, very little new literature was found about how perceptions are developed. Given this gap, the researcher chose the work of two authors as a foundation to describe how perceptions are developed. Their models accurately synthesize the findings in the literature in relationship to perception development. The first author, Ross Stagner (1950), examined how employees interact in the work environment. His study examined conflict between union workers and management in an industrial setting (Dunnette, 1965) and he argued perceptions come from early learned behaviors, stimuli in the work environment, and the attitudes of employees. Another author, Stan Kossen presented a similar and more recent model that describes how perceptions are developed (1994). Perceptions are first filtered through early learning (upbringing) then applied to the work environment where judgments are made based on widely applied generalizations referred to as the halo effect. Both approaches are listed in Table 1 to show the components of each model.

The perception development models in Table 1 show how both authors view perception development. Both seem to agree perceptions are first filtered through the lens of early learning, upbringing, and other learned behaviors. Both models, although different and unrelated, point to how stimuli from the environment ultimately lead to a perception. When considering Stagner and Koseen's models one can understand how perceptions are both unique and individual to each SAO. Champoux (1996) describes the uniqueness and individuality of perceptions as a "mechanism" (p. 74) impacting the SAOs' interactions with the environment. To better understand the process of perception development, one must examine how SAOs behave after a perception is developed.

Viewing Perceptions Differently

Literature supports the notion that perceptions vary from SAO to SAO. According to Leavitt, "different people perceive"… the work environment "in different ways" (1988, p. 338). Glimer asserted SAOs tend to react to the work environment based on the way a stimulus is perceived (1961). Perceptions are based on past experiences related to an event or stimuli within the work environment. Thus, when an event or stimulus (within the environment) occurs, it is associated with a past event, and a judgment is made (Gilmer, 1961). In simpler terms, every new event is judged based on prior learning, and behaviors follow a pattern of previously learned behavior (Kelly, 1969). One can argue SAOs may assume similar situations yield the same outcomes (positive or negative) based on what was learned from previous related experiences. Thus, previous experiences and behaviors suggest if a SAO had a bad experience within the work environment, when presented with a similar experience, he/she may assume the same negative outcome may occur. The innate human response to stimuli offers a broader understanding of how perceptions impact SAOs.

This notion of perceptions takes on greater importance when applied to the relationship between SALs and their SAOs. Perception development makes it necessary for the SALs to be aware of the perceptions of SAOs. Such awareness provides the SAL with a glimpse into the working culture of SAOs. Ultimately, an understanding of the working culture provides the SAL with enlightened insight into the issues contributing to the performance of SAOs. This allows SALs to make changes in the work environment to promote better performance.

Table 1. *Factors that Contribute to the Development of Perceptions from Stagner and Kossen*

Stagner, 1950	Kossen, 1994
Biological quality of the organism – The physical abilities of the person impacts perception.	Hereditary factors – The way a person is raised to view the world.
History of the organism – Events shape the way one may observe the world.	Environmental background and experience – The way one perceives a situation is significantly based on past experiences.
Purpose of the organism – Role and motives of the person.	Projection – People have an unconscious tendency to attribute to others some of their individual traits, faults, and motives
Attitudes – Mixture of motives and past experiences of the person	Snap judgments – Making a decision before gathering enough information to come to a valid conclusion.
	Halo and Rusty Halo Effects – A person is good at one thing and is assumed to be good at something else (creating a halo). A Rusty Halo Effect is assuming that negative effects continue in all settings regardless of the opportunity to change.

Conceptually it makes sense for SALs to understand the work environment of SAOs. With awareness and knowledge comes the ability to impact performance. For example, in an environment where communication is a problem, SALs can work to promote and provide opportunities for SAOs to communicate freely about work issues. An outcome of such an open communication environment is the sense of empowerment (Gilley & Maycunich, 2000). Empowerment leads to positive impacts on the SAOs perceptions of the work environment.

Cautions about Perceptions

As discussed in chapter 1, SALs have the major responsibility of supervising SAOs. A component of management style sometimes involves the SAL nurturing an empowering work environment. As a caution to this approach, the SAL must understand that humans naturally tend to believe their perceptions as reality (Boshear, 1977). It may be true SAOs sometimes tend to ignore reality and make assumptions about the work environment as they see fit (Kossen, 1994). Part of this tendency is related to the natural human need to make snap decisions ignoring many of the available details (Engel, 2005). Engel describes this snap decision making as "heuristic firing" (2005, p. 32). Such firing is a mental process where similar experiences are associated to become or be perceived as a type of "pattern" (2005, p. 32). The outcome of this type of behavioral pattern can lead to misconceptions as a stimulus is not fully examined and judgments are made as a way to simplify the situation (Lawler, 1973). Put another way, faulty perceptions are misconceived, distorted details which are an inaccurate observances of a situation (Dunnette, 1965). Therefore, it is important for the SAO to take a step back and examine all details before jumping to conclusions that may be false (Lawler, 1973). Conceptually it makes sense one should be cautious about jumping to conclusions, but Kelly (1969) explains that is hard for SAOs to separate perceptions from reality. Accordingly, it is important to understand perceptions of SAOs are essentially their reality. For this reason, SALs must find ways to be in tune with SAOs' perceptions to understand how they impact individual performance in the work environment.

Conclusion

Student Affairs Officers have a tendency to perceive events in a uniquely different fashion. Although these perceptions are seen as reality, some caution is necessary as these perceptions, due to snap judgments, may not be correct. It is important for the SAL to understand how perceptions are developed to better support SAOs. Perception development is an important foundational component of this literature review as it impacts all of the following sections.

Locus of Control

The SA literature presents little information and empirical studies examining the construct of locus of control (LOC) in higher educational settings. This gap supports the necessity for this study. Within the field of SA, SAOs have varying perceptions about their work environment. A qualitative study with new SAOs found interactions with peers and other SALs determined their fit with the institution and perceptions of the work environment (Renn & Hodges, 2007). The literature suggests some SAOs decide to leave their jobs soon after being hired based on their perceptions of the work environment (Burkard et al., 2005). Other studies have found within the first five years of employment 50% to 60% of SAOs make their decision whether to maintain a career within the field (Tull, 2006). The decision to leave or stay revolves around the SAOs' perceptions of their level of control of the environment. This lends to the need to examine how LOC impacts the work environment of SAOs. Given the lack of literature related to LOC and SAOs, this portion of the literature review examines the components of LOC from a broad perspective, which are synthesized and specifically applied as concepts to the role of SAOs.

Locus of control (LOC) influences employees' perceptions of the work environment and level of performance (Spector, 1982). The concept of LOC comes from the 1950s when Julian B. Rotter, a psychologist developed Social Learning Theory to help psychologists understand the way clients interact with their environments (Beretvas, Suizzo, Durham, & Yarnell, 2008). Social learning theory has two distinct components, Internal/Intrinsic Locus of Control and External/Extrinsic Locus of Control (Linz & Semykina, 2008). Both speak to employees' perceptions of the amount of control exhibited in the work environment (Treven & Potocan, 2005). Internal control relates to intrinsic thoughts and judgments formed by the employee about the work environment as a reaction to organizational climate and interactions with members of a workgroup. External control relates to extrinsic categories completely out of the employee's control (Itzhaky & Ribner, 1999) such as job design, SAL/SAO supervisory relationship, and organizational structure. Ultimately, the level of control (intrinsic and extrinsic) shapes perceptions of the work environment and quality of performance displayed by the employee (O'Brien & Lefcourt, 1984), Further examination of LOC literature provides great insight into how the work environment frames the perspective of SAOs. The first step in understanding LOC involves understanding how internal or intrinsic categories impact the issue of control.

Internal/Intrinsic Locus of Control

Rotter described internal locus of control as the employees' ability to take responsibility over their behavior. This responsibility is determined by the level of reinforcement or stimuli gained from the work environment (1954). Employees' have a tendency to naturally link stimuli with a behavioral action (Riggio, 2004). Ehigie and

Akpan (2006) stated any reaction to stimuli is solely in the control of the employee and fate and luck have no impact on employees' behavior. As a result internal locus of control is directly connected with an intrinsic decision to perform job duties at a specific level of quality (Locke, 1983).

Quality of performance is based on employees' level of confidence in relationship to the job duties, which must be performed. Put another way, internal locus of control often lends to self-efficacy of employees. Self-efficacy is important as it shapes the way employees' view themselves in relationship to the job duties and work environment. Moreover, self-efficacy represents the level of power employees feel in a situation. Silvester, Mohamed, Anderson-Gough, and Anderson (2002) added self-efficacy empowers employees because they now feel empowered or in control. This aspect of control is important as the literature supports the notion performance is connected to perceptions of work commitment (Luthans, Baack, & Taylor, 1987), and happiness with the job (Kirkcaldy, Shephard, & Furnham, 2002). Therefore, efficacy is seen as a major driver of perceptions within the workplace. Thus, the combination of confidence, self-efficacy, and locus of control influence perceptions and ultimately impact performance. Although many previously referenced authors discussed the issue of internal/intrinsic LOC, empirical studies were included to lend to the importance of this study.

Empirical Evidence Supporting Locus of Control

Empirical evidence is important in the validation of scholarly assertions. Dunn, Halonen, and Smith explained, "A fact is a piece of information supported by evidence and linked to empirical data" (2008, p. 119). A review of the literature shows over 100 empirical studies have contributed to the understanding of internal LOC. Many of the

following studies synthesize the literature specific to LOC. McKenna (2000) found a strong connection between LOC and confidence. This study supports the notion of confidence coming from an internal/intrinsic source within employees. Confident employees are more likely to have positive perceptions of the work environment and tend to focus on quality performance (McKenna, 2000). O'Brien and Lefcourt (1984) supported this notion as reinforcement comes intentionally in the form of confidence in employees abilities to perform duties and take initiative. Employees who are confident tend to be more motivated to perform well in their jobs (O'Brien & Lefcourt, 1984). Other empirical studies found strong links between LOC and job satisfaction with employees (Erbin-Roesemann & Simms 1997; Huang, 2006; Oliver, Jose, & Brough, 2006; Salazar, Pfaffenberg, & Salazar, 2006; Sidani & Gardner, 2000). Satisfaction suggests something positive is happening within the work environment, which impacts performance and confidence.

In relationship to confidence, Frese (1989) used a questionnaire and found employees in work settings who are confident tend to believe in their abilities to have control over their environment and this leads to higher quality of job performance. His findings suggest a strong (LOC related) correlation between confidence and job satisfaction (Frese, 1989). An earlier study found employees who are self-confident (efficacious) are comfortable in their work environment and are less likely to be threatened by problems within that environment. The ability to not fear threats comes from employees' natural need to be in control (White, 1959). The level of comfort (within an environment) is driven by the employees' perception of the work environment (Blau, 1993; Glass, 1972). Examining stress in the work environment supports this

finding as it argues employees, who are confident and perceive the environment in a positive way, spend little time worrying (about the environment) and more time focusing on performance (Schönpflug, 1983). This perception of confidence and control represents safety for the employee. A level of safety causes the employee to feel empowered to perform as necessary within the environment (Miller, 1979). Overall, the empirical studies presented in this section, leads one to conclude there is a significant connection between internal LOC, confidence, and job performance.

Conclusion

The literature points to a strong connection between locus of control and confidence and its impact on employees' perceptions and performance. One could conclude that employees, in this case SAOs, who are self confident with their perceptions of the environment, have positive impacts on performance. According to the literature these perceptions are formed from judgments made about the work environment, as perceived by the SAOs. Therefore, these judgments may dictate the level to which SAOs perceive their fit with the job (Oliver et al., 2006) and fit within the work team (Ahles & Bosworth, 2004). Understanding the notion of fit provides great insights into the way SAOs perform in the work environment. As perceptions are intrinsic in nature, it is quite possible the SAL may never fully understand the work environment from the perspective of the SAO. Due to the internal nature of LOC, it is necessary to examine the external/extrinsic aspects of this construct to gain a well rounded view of the total impact of LOC on performance.

External/Extrinsic Locus of Control

As discussed in the previous section, there is little literature studying locus of control with student affairs officers. This section examines external/extrinsic LOC from other fields and draws connections between the literature and findings to the field of SA. The following section examines external/extrinsic LOC from a broad perspective.

External/Extrinsic LOC is the second component in Rotter's Social Learning Theory developed in the 1950s (Fernandez et al., 2008; Rotter, 1964). External LOC relates to the notion that employees' believe they have no control over the work environment (Gardner & Beatty, 1980; Janssen & Carton, 1999; Triplet & Cohn, 1984). The work environment consists of relationship with the supervisor (Blau, 1987; Landry & Vandenberghe, 2009), job design (Burr & Cordery, 2001; Jaskyte, 2004), and organizational design (Sims, Szilagyi, & Keller, 1976). Rodríguez, Bravo, Peiró, and Schaufeli (2001) stated as employees' have no control over the environment; they believe events come from luck or other random forces. Put another way, external locus of control is the same as having little or no control over events and personal circumstances (Chen & Wang, 2007; Oliver et al., 2006). Employees, who have less power over circumstances, are more likely to experience stress as the work environment tends to dictate how they should respond (Glass, 1972). Thus, if one perceives they have power over their work environment, they may tend to accept the situation (Schönpflug, 1983). Given the definition of the work environment, it becomes evident why employees feel they do not have control because almost all of the components (supervisory relationship, job design, and organizational design) cannot be changed by their actions. To further validate the

points made about external/extrinsic LOC and its importance to this study, empirical literature is examined.

Empirical Evidence Supporting External/Extrinsic Locus of Control

Empirical articles are used to support the construct of external/extrinsic LOC. Many empirical studies have found External LOC has a strong effect on the level of job satisfaction. In a study with older workers, Mitchell, Smyser, & Weed (1975) found well developed work policies or practices lead to higher levels of job satisfaction. Employees who tend to be less comfortable with the work environment tend to have higher levels of anxiety and have less job satisfaction (Hartley et al., 1993). Both studies point to the important issue of comfort. In this case, comfort relates to the feeling of connectedness with the work environment. The level of comfort within the work environment has a direct impact on job satisfaction. External LOC categories such as low supervisory support, increased work load, and broken communications contribute to low job satisfaction of participants. When these categories were beyond the control of employees, external LOC has the power to impact employees' perceptions and behaviors (Rodriquez et al., 2001).

In terms of impacting behavior, Silvester et al. (2002) found external LOC categories impact the ways interview candidates behave. Candidates who experience stress during the interview process (something happening in the environment, which is out of their control) were more likely to struggle with their abilities to manage their impressions with the interviewers (Silvester et al., 2002). Stress in this situation has caused a sense of losing control. Thus, if a candidate is not in control of the situation, it is hard to perform well. Many authors have argued it is natural for employees to want

control. And when this need is not fulfilled, it causes stress and frustration among employees (Dormann, Fay, Zapf, & Frese, 2006; Frese, 1989; White 1959). Miller (1979) added control represents a natural safety mechanism for employees. Thus one can conclude the level of comfort employees have in their work environment directly impacts their ability to perform job duties; higher levels of comfort support higher levels of performance.

Conclusion

The level of comfort and control with the work environment has an impact on employee behavior or performance. Julian B. Rotter was the father of Social Learning Theory, which describes locus of control, a multidimensional construct including internal and external sources of control (Rotter, 1964). Within this construct both internal and external LOC represent two aspects of control (Levenson, 1981). Each aspect speaks to employees' level of control in the work environment, which ultimately impacts their behaviors (Chen & Wang, 2007). Internal LOC comes from employees' control over their actions in relationship to the work environment (Dormann et al., 2006). External locus of control represents environmental categories beyond the control of the employee (Silvester et al., 2002). Together both internal and external control categories have a direct impact on work performance. Locus of control is used throughout this review as it is an important component of the work environment. When relating this construct to SA it is reasonable to assume that both components of LOC (intrinsic/internal and extrinsic/external) drive the SAOs' perceptions of their work environment.

Stimuli/Components of the Extrinsic/External Work Environment

Based on the first section of the literature review, the constructs of LOC and perceptions are examined to show how they impact behaviors of SAOs. Figure 2 shows the combination of the two constructs in what is called the process of developing perceptions based on the work environment. Using a systems approach (input, process, output), the model in Figure 2 shows how stimuli from the external environment (noted by an oval) are judged against experiences to develop a perception (diamond). The rectangle following the diamond represents the outcome of the perception developed. This outcome can represent a high or low level of performance or a decision to leave the position/institution. The researcher suggests this process occurs in order from stimuli to perception to behavior.

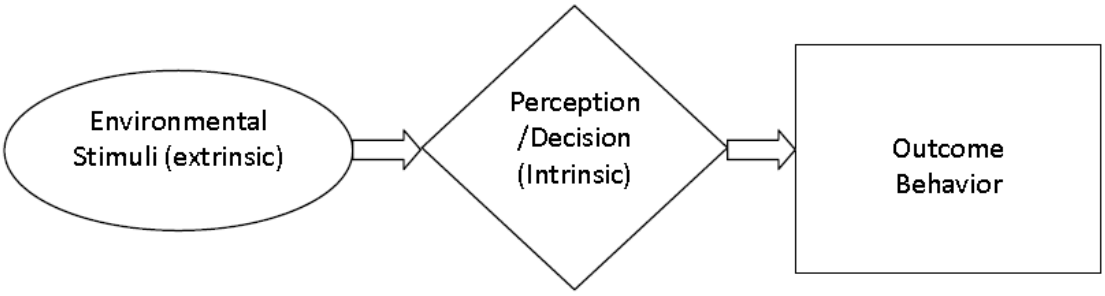

Figure 2. Perception Development Process

The following sections of the literature review examine how components of the work environment (external) impact the intrinsic thoughts of SAOs relative to the relationships with others and institutional climate. Figure 2 is used to support points as needed. For definition purposes, the work environment pertains to everything within an organization (Rothwell, 1996, p. 32). For this study, extrinsic aspects of the work

environment are specifically defined as the following constructs: (a) relationships between employee and supervisor (Gilley & Broughton, 1996), (b) job design and ability to do the work (Rummler & Brache, 1995), and (c) organizational structure defining the work environment (Newman, 1975). Although many other constructs are present in the workplace, these three identified constructs are directly associated with the use of the term work environment in this study.

Relationships between the Student Affairs Leader and Officer

Westman and Bouman (2006) asserted that SAOs are the greatest asset in terms of helping to achieve overall college/universities goals (p. 2). The literature supports the notion the working relationship between SALs and SAOs is important. This relationship is composed of a series of two-way interactions ultimately leading to the SAL and SAO working together toward common goals or objectives. An approach that supports this process is performance coaching. The literature notes coaching enables the SAL to assist the SAO to work in unison on job duties (Harned & Murphy, 1998). “Coaching has been one of the fastest growing new trends” (Saling, 2005, p. 640) in the process of developing relationships between SALs and SAOs. Performance coaching is defined as an approach to provide the SAO with enough information to develop job related goals, which are specific, measurable, attainable, realistic, and include a time limit (Haidar, 2007; Jones & Wallace, 2005; Lorey, 1977). Thus performance coaching must be deliberate and thoughtful. Empirical studies have noted employees flourish in environments where performance coaching is used (Guanci, 2008; Hart, 2005; Shriver & Re, 2006; Turner & Rimanoczy, 2008). Wilson (2007) asserted a lack of coaching represents negligent leadership. It is important for SALs to provide coaching as a key component in managing

SAOs along with the oversight of their department/division. As a point for consideration, SALs must work on developing their skills to effectively manage employees.

It is critical for SALs to spend time developing their skills to effectively manage SAOs, who fulfill diverse jobs within their department (Hamlin, Ellinger, & Beattie, 2004). A number of authors underscore the point that coaching is a critical approach to managing employees (Antonioni, 2000; Bianco-Mathis, 2002; Hunt & Weintraub, 2002; Ragsdale, 2000). During the coaching relationship, leaders must find the appropriate balance between micromanaging and providing the employee with enough freedom to perform as needed (Cohen & Jaffee, 1982). For college educated personnel as SAOs, micromanagement yields negative results. Presutti (2006) explained "micromanagement will generally, at best, create a perpetual environment of dependency, inefficiency, and unease and, at worst, render irreparable harm to staff morale" (p. 34). Finding the appropriate balance means a supervisor needs to better understand his/her personality and how it impacts the coaching relationship (Tarver, Canada, & Lim, 1999). This is important as SALs must be comfortable within themselves, as they need to apply this to effectively coach SAOs to produce desired performance outcomes. Hopkins-Thompson (2000) added coaching an employee to be successful involves the process of developing skills and providing feedback on job related duties.

Student Affairs Officers' Needs for Coaching

In an empirical study, SAOs were asked to rank their professional development needs and support from supervisors. Understanding job expectations was ranked as one of the highest needs (Renn & Hodges, 2007). This finding supports the fact that SAOs have clear expectations about outcomes of the supervisory relationship. These findings

can be adequately supported through the coaching relationship. A study with teachers found coaching yielded more self-assurance, motivation, and higher levels of performance (Naylor, Gkolia, & Brundrett, 2006). Naylor et al. (2006) found leaders observed positive changes in employees' behaviors including increased productivity and closer team interactions after receiving coaching. Based on the findings from both studies, one may conclude the overall process of effective coaching yields positive results. In addition, effective coaching leads to the development of a relationship between the SAL and SAOs. As a consequence, this impacts the SAOs' perceptions of the environment in which they work. Given the impact of coaching, it is necessary to examine how feedback fits into the process.

Feedback

As discussed earlier, coaching has grown in popularity. During the coaching process, SALs role is to provide SAOs with constructive feedback related to observed job functions (Komives & Woodard, 2003). Feedback is a vehicle by which, the SAL can provide a critique of observed behavior to SAOs to correct problems and encourage growth. Effective feedback systems include two way communications – SAL to SAO and SAO to SAL. This type of feedback is an open system because messages flow back and forth. An empirical study noted employees valued opportunities to have honest communications with their supervisors (Malaney & Osit, 1998). This illustrates the power of open feedback between SALs and SAOs. The converse also applies as SAOs become frustrated when open communication with the SAL is not possible. In some cases, lack of communication leads to a breakdown in the relationship and contributes to the development of negative perceptions. It is important for both SALs and SAOs to

work toward open communications to make feedback more impactful (Cohen & Jaffee, 1982). A study found new SAOs valued receiving sufficient feedback to perform job duties (Renn & Hodges, 2007). According to Hamlin et al. (2004), a key responsibility of SALs is to provide SAOs with adequate feedback. Other empirical studies contend feedback is a positive intervention that leads to significant increases in work performance (Wilk & Redmon, 1990). Based on findings from empirical studies presented in this section, feedback is an important component in the relationship between SALs and SAOs. In terms of perceptions, it is important for both SALs and SAOs to work toward open communication. Although best intentions can be misinterpreted, open communication can help reduce frustrations and the development of negative perceptions. It is important to note feedback is an important aspect of the work environment and is not in the SAOs' control. SAOs can control their behavior, but not the behavior of SALs. This lack of control points to extrinsic/external LOC where feedback can be either effective or ineffective. As a consequence, this is an area where SAOs' perceptions are developed based on the stimuli (feedback) from the supervisors. Therefore, feedback leads to an outcome of higher or lower levels of performance and participation in the job.

Participation, Job Involvement, and Decision Making

Malaney and Osit (1998) explained employees show a clear desire to participate in coaching, feedback, and decision making relative to their jobs. Participation represents a process where SAOs are involved in shaping the outcomes of the supervisor employee relationship. This process is central to the notion of participation and involvement in the job. This includes opportunities for SAOs to offer input in the process, which is heard by the SAL. SAOs have a natural desire to participate in shaping their work. This point is

further supported in a qualitative study by Guido-DiBrito (1995), where a SAO stated "it makes me angry when someone makes a decision that affects me that I have no say in" (p. 229). The comment illustrates participation in shaping one's work is important and can cause SAOs to feel more or less connected with the department/division. The same respondent noted that although he did not expect to always have things his way, it is important to have the opportunity to participate in the decision making process (Guido-DiBrito, 1995). Again, this comment speaks to the importance of involvement and participation in the job.

An outcome of participating in shaping work performed is the ability to contribute to the decision making process. This allows SAOs to feel as if they are contributing to the environment in which they work. A component of this is the ability to solve problems related to the work environment. SALs play a big role in encouraging SAOs and workgroups to participate in the problem solving process. It is also important for SAOs who participate in the decision making process to be "allowed to disagree without penalty" (Malaney & Osit, 1998, p. 323); this provides an environment where SAOs feel comfortable participating in the communication process and creates an open environment where communication can flow freely. To create such an environment, Hamlin et al. (2004) explained SALs have the responsibility to provide opportunities for SAOs to make decisions and participate in shaping the work that is performed. This is a "joint effort" between SALs and SAOs (Carpenter, Torres, & Winston, 2001, p. 4). This process creates an environment where SAOs feel free to take initiative and become engaged. Within this environment SALs are able to observe appropriate behavior and provide recognition of performance as needed.

Recognition

Recognition of performance is an important aspect of the SA work environment. Many SAOs perform job duties without the expectation of reward or acknowledgement (Balmores, 1988; Lorden, 1998; Richmond & Sherman, 1991). In addition, "most student affairs practitioners expect low pay and are motivated primarily by intrinsic rewards … institutions "should capitalize on this by ensuring such rewards are actually obtained" (Lorden, 1998, p. 213). SALs must recognize performance outcomes are driven by recognition and reward (Malaney & Osit, 1998). "Most employees will only contribute to work they consider their fair share; extra effort only comes when extra return follows" (Cohen & Jaffee, 1982, p. 94). Put another way, SAOs perform when their work is acknowledged. The power of reward is very significant as employees have a tendency to report accomplishments to quickly seek acknowledgement for their work from their supervisor (Wilk & Redmon, 1990, p. 66). Given the power of recognition, it is important SALs use some form of acknowledgement to create an environment that encourages the performance of SAOs.

Conclusion

The aforementioned issues such as coaching, feedback, participation, and recognition contribute to the development of the relationship between the SAL and SAOs. These issues represent extrinsic/external LOC, which in most cases is beyond the control of SAOs. In addition, the relationship has a direct impact on the SAOs development of perceptions of their work environment. Finally, the relationship between SALs and SAOs is important when trying to better understand the work environment.

Job Design and Ability to Do the Work

Within the work environment, the process of performing work is an important aspect of what SAOs do. Whether, conducting an individual advising meeting with a student, overseeing a residential hall, or processing a financial aid award package, the specifics of the job duties are important to SAOs. The previous section focused on communication between SALs and SAOs, now it is necessary to examine the outcome; the ability to do the work, which is directly related to external/extrinsic LOC and is out of control of SAOs. Within the context of the SAOs' ability to do the work, it is necessary to examine how jobs are designed, how the work is organized, and how resources impact the ability to do the job.

Job Design

The literature points to major developments in job design movement in the early 1900s. During this time business and industry began to understand the need for further development of job duties. A stream of literature points to three distinct models adequately representing the development of the job design movement. The first model, created by Fredrick Taylor in 1911, was the scientific management model (Morgan, 2006). This model emphasized simplification of job duties for employees and assumed employees are unskilled and uneducated and need to have duties made simple. The second model by Oldham and Hackman (1981), the Five Core Job Characteristics, presented a different argument incorporating interactions with coworkers, autonomy, and feedback. The model is based on the reality many workers possess higher levels of skills and education. The third model, Five Principles of Good Job Design, incorporated a variety of measurable duties by Littler and Salaman in 1984 (Hodson, 1999). This model,

similar to Oldham and Hackman's, assumes employees have higher skill sets and levels of education. Each of the three models is presented in Table 2. Examining the three models, one sees the philosophical progression of thought behind the design of jobs. This progression becomes very important when applying these concepts to the design of SAOs' jobs.

The more recent models in Table 2 can be applied to the design of SAOs jobs as a large majority of SAOs must possess a minimum of a bachelor's degree to perform job duties. The minimum requirement assumes SAOs have a specific level of cognitive knowledge. This level of knowledge could be defined using Bloom's Taxonomy. Bloom's Taxonomy includes six levels: knowledge, comprehension, application, analysis, synthesis, and evaluation (Bloom, 1956). Many institutions set bachelor degrees requirements to ensure students are able to understand knowledge at the comprehension and application level of Bloom's Taxonomy (Nichols, 2005). Given the minimum degree requirement, SAOs possessing a bachelor's degree (minimum requirement to work in the field) are able to interact with the stimuli in the external work environment at the level of application. SAOs then apply knowledge to perform job duties while using discretion, working with autonomy, and employing multiple skill-sets to perform job duties. This process is made easier as SALs provide guidance on expected work standards. It is helpful for SALs to communicate how the job relates and contributes to the mission of the institution. The next component of job design for SAOs is how duties are clarified and performed.

Table 2. *Comparison of Three Job Design Models: Characteristics and Components*

Taylor (1911)	Hackman and Oldham (1981)	Littler and Salsman (1984)
Simplification – separate duties into noncomplex steps	Skill variety – multiple skills are used to complete job duties	Adequate job scope – duties can be completed and achieved
Straightforward – remove decision making process from job duties	Task identity – job duties contribute to a complete process	Quality control – duties can be measured against standards
Task Match –unskilled labor given easy duties, skilled labor given complex duties	Task significance – job duties are meaningful to employee/organization	Task variety – employee used various skills to complete duties
Maximization – reduce movement (maximize space)	Autonomy – discretion is used to complete job duties	Freedom – employee can work at a comfortable pace
Efficiency – reduce time taken on job duties	Feedback – information is provided to correct/improve job duties	Social interaction – job duties include interactions with others

Job Design and Clarity

Given the complex nature of institutions, it is important for SALs to give consideration to how jobs are designed and duties are clarified. The design of jobs contributes to the extrinsic LOC categories that impact both perceptions and performance. A study of utility workers found a positive association between role clarity and performance (McEnrue, 1984). Keaveny and McGann (1980) found role clarity positively associated with good perceptions of the work environment of SAOs. Thus, it can be assumed positive perceptions are based on SAOs being satisfied with the work they do when they are clear about duties, which leads to better performance. Clarity can be increased by including duties in the job description. In contrast, another study found a

lack of job clarity can have a negative impact on job performance (Peters & O'Connor, 1980). One may conclude SALs should pay special attention to the process of designing jobs to ensure that the clarity of role is very evident to SAOs. Ultimately this can lead to extrinsic environmental stimuli positively impacting the perceptions of SAOs. Once job clarity is gained, it is important to examine its connection with tools and resources.

Tools and Resources

Another important component of the SAOs' ability to perform job duties is access to tools and resources. A stream of literature shows that tools and resources are positively associated with employee performance (Becker & Steele, 1995; Brill, Keable, & Fabiniak, 2000; Brookes & Kaplan, 1972; Vischer, 1996). This literature suggests tools and resources have a direct impact on the level of performance exhibited by SAOs, which is supported by empirical studies asserting tools and resources are an integral component of the effective performance of job duties (Kupritz, 2002). Within the context of the stimuli from the work environment, it is important resources and tools are present as they aid the achievement of job duties. An example of a tool is a calculator used during advising sessions to compute grade point averages. An example of a resource is a learning skills assessment administered to identify student's area of strengths and weaknesses. SAOs then use the assessment scores to provide academic skill building advising. In addition, availability, or lack thereof, of resources and tools contributes to the SAOs' perceptions of the extrinsic work environment. A study of women SAOs found the availability of tools and resources contributed to their perceptions of the work performed (Kramer, 1991). Ultimately tools are important and should be provided as job duties change. Ultimately, tools and resources allow SAOs to perform job duties, thus

meeting the strategic goals of the institution (Becker & Steele, 1995). Beyond resources and tools, the way work is organized must be examined to understand how work impacts performance.

Organization of the Work

Another key construct in the ability SAOs have to perform job duties is how the work is organized. Organization is based on how work is logically ordered (Salvendy & Karwowski, 1994). Organization ranges from how SAOs are scheduled to work to how the work environment is arranged. The concept of organization is based on the way SAOs perceive stimuli are arranged in the work environment (Kupritz, 2002). These perceptions are based on functions and guidelines within the environment (Rapoport, 1982). For example, ABC University has a need for evening and weekend assessment tests to be given to students. However, the Testing Center is open during normal daytime hours. The senior leadership has not made any decisions about changing the hours. An issue like this would leave SAOs to wonder why the leadership did not change the work environment to meet the needs of students. This may lead SAOs to perceive the institution is not truly committed to meeting students' needs based on observed cues (stimuli) from the work environment. Even though the institution may have the best intentions, a negative perception may develop.

The same concept is relevant to the way SAOs work is arranged. Job duties should be arranged around similar functions (Armstrong, 2008) and in a way that allows SAOs to perform duties to meet the expectations set by SALs. Work scheduling is also an important part of how the work is performed. Schedules should support the mission of the department/division and promote the completion of job duties. SALs ensure

departments/divisions are arranged in a way that supports the effective accomplishment of job duties. Organization is a key component of how SAOs perceive their work environment and how they perform within that environment. After the work is organized, it is important to ensure SAOs have appropriate training to effectively perform job duties.

Training

For operational purposes, training is defined as deliberate interventions designed to change behavior, develop abilities, and develop skills necessary to perform job duties (Armstrong, 2003; Rothwell, 2005). The concept of training is very important to SAOs' ability to perform job duties and contribute to the institution's mission. Though training is multiple faceted this review only examines how training impacts the extrinsic work environment of SAOs.

Standards for the field of student affairs became a major issue for examination in 1986 as the Council for Advancement of Standards in Higher Education (CAS) produced the first Standards and Guidelines book. According to the CAS website, SAOs need "access to a comprehensive and valid set of criteria to judge support program quality and effectiveness" (Council for Advancement of Standards in Education, N.D.). The most recent Standards and Guidelines from 2006 provide an outlined set of standards for SA personnel ranging from abilities to serve students and program assessment to management competencies (Miller, 1979). These standards provide SALs with guidelines for developing SAOs and provide an outline of specific skill sets that SAOs should possess. Supporting this, Waple (2006) conducted a study of entry level SAOs examining their skills and competencies and recommended the two major student affairs professional organizations, Student Affairs Administrators in Higher Education (NASPA)

and American College Personnel Association (ACPA), work together to develop common guidelines for job functions. This recommendation speaks to the lack of consistent competencies of SAOs. Pope and Reynolds (1997) argued SAOs should possess seven core competencies. Other authors suggested SAOs should have a common core knowledge gained through student affairs graduate programs (Hyman, 1985; McEwen & Talbot, 1998; Pope & Reynolds, 1997).

In developing CAS standards, it is important for SALs to ensure training activities are relevant to job duties for SAOs. SALs develop training programs. These come from multiple sources including webinars, conferences, in house training, and on the job training (Janosik, Carpenter, & Creamer, 2006). Higher education institutions are different from other industries as few tend to provide organized human resource development training activities (Janosik et al., 2001). Given the lack of consistency with training, Winston, Torres, Carpenter, McIntire, and Peterson (2001) argued a key role of SALs is to develop SAOs. In addition, because SALs represent the strategic and process components of the institution (Rummler, 2007), it is necessary to ensure training activities are closely connected to strategic needs of the institution (Schwartz & Bryan, 1998). Beyond linking training to the needs of the institution, it is the responsibility of SALs to ensure that SAOs have adequate training after they are hired (Renn & Hodges, 2007). It is the responsibility of SALs to provide SAOs with training throughout their tenure and to play a role in the development and encouragement of a training friendly culture.

Another aspect of the duties of SALs is to promote a culture that values training. According to Holton, Bates, Seyler, and Carvalho, a culture valuing training has a direct

impact on SAOs' perceptions of their extrinsic work environment (1997). These perceptions impact the attitudes of SAOs and ultimately translate to the outcome of performance or the work performed on a daily basis (Childre & Cryer, 2000). Yamnill and McLean (2001) contended organizational cultures open to training influence how newly acquired skills are transferred to actual job duties. Therefore, if SALs are interested in improving the performance of SAOs, developmental activities should be encouraged. After participation in training, rewards and acknowledgement should be provided to further cement the importance of development. Providing rewards helps make the training process more valuable, thus impacting SAOs' perceptions of the work environment.

Conclusion

How a job is designed has a direct impact on SAOs' ability to complete job duties. It is important to ensure that SAOs are clear about how the duties are to be performed; this allows for increased performance and contributes to the development of perceptions. Training assists with the development of skills and allows SAOs to perform job duties. In addition, rewards encourage the transfer of new skills to job duties.

Institutional Structure that Defines the Work Environment

Institutional structure is very important within the work environment. Research suggests institutional structure has a direct impact on the way SAOs perceive their work environment. Chandler (1962) asserted the work environment should be designed based on the strategic needs of the organization. Thus, organizational structures should be developed to assist with the primary work performed by the institution. Such structures exist to promote effectiveness and efficiency within the institution, division, department,

and team (Shell, 2003). To fully understand an institution, it is necessary to look beyond the organizational chart and consider how the processes, policies, and structures impact the work environment (Armstrong, 2003). Within the working environment, it is necessary for SALs to understand the institutional structure from the SAOs' perspectives. This allows SALs to better understand the impact of perceptions on performance. This ensures standards are realistic, achievable, clearly stated, and related to the institution's mission. The first component of the structure is to understand how standards impact the work environment.

Standards and Expectations

Work standards are more than a simple interpretation of rules and policies (Burkard et al., 2005). They serve as the formalized and defined norms defining the work environment. Within the student affairs work environment, it is important to have standards as they directly impact the work environment. An empirical study that examined job satisfaction found SAOs had a strong desire to have clearly defined policies (Malaney & Osit, 1998). Work standards provide guidelines for the performance of job duties. Standards and expectations work together within the institution to provide structure for the work to be performed.

Empirical literature points to the importance of work standards and expectations. A questionnaire with SAOs measuring their professional development needs, found work standards and clear job expectations received the highest rankings (Renn & Hodges, 2007). One may assume high rankings come from the SAOs' desire to have clear expectations to perform job duties. This supports the need for SALs to communicate standards to SAOs and describe how they relate to the mission of the

department/division. Rummler and Brache (1995) contended clear job expectations and standards allow SAOs to become familiar with duties needed to perform the job. Standards impact SAOs' perceptions of the work environment. In terms of performing job duties, it is important to consider how this impacts group performance.

Workgroup Performance

Standards and expectations (part of the institutional structure) impact the performance of workgroups (Coopman, 2001; Elmuti, 1996; Strubler & York, 2007). Within workgroups, one expects a level of familiarity among members. The level of familiarity can lead to conclusions about how various group members are treated within the institutional structure. Put another way, familiarity encourages group members to develop closer connections through discussions about work and other aspects of life. The institutional culture and SAL play a role in encouraging SAOs to become familiar with each other. Familiarity can lead to closer workgroups and improved performance.

A study of SAOs examined how clearly stated standards and expectations became very important when they observed peers being treated unfairly (Janosik, 2007). The same study discussed how perceptions of unfair treatment impacted the performance of SAOs and how perceptions impact group performance specifically related to the lack of standards and expectations. Janosik's study underscored the importance of standards as they provide for a work environment governed by a set of predefined norms (2007). It is important for institutions to develop standards and policies that promote fairness. One can conclude work standards are an important component impacting individual and group performances based on the empirical literature. The next aspect of examining the issue of institutional structure is to explore how it impacts job performance.

Job Importance and Responsibility

The institution provides structure for SAOs in terms of the jobs performed. Levine and Romanoff (1989) explained job duties should be closely associated with the strategic goals and objectives of the institution. This association leads to an importance for each job being performed. When job duties are associated with the needs of an institution, SAOs have higher perceptions of the importance of their jobs. SALs must communicate how the work performed is important in the bigger picture of the institution. Once SAOs view their jobs as important, the next step is responsibility. In some cases, the literature suggests employees who see their jobs as important take responsibility for the work performed (Jaques, 2003). Ultimately, higher levels of responsibility produce a feeling of importance with SAOs' performance. A study about perceptions of key job competencies found SAOs highly valued jobs that allowed them to be responsible (Burkard et al., 2005). Hamlin et al. (2004) explained SAOs tend to want to use their level of responsibility and to set standards for performance and mentoring others. The close link between job importance and responsibility can be viewed as an outcome of the various aspects of the institutional structure, which defines the work environment for SAOs.

Conclusion

Structure provides the institution with a formal way of operating, where SAOs are able to perform job duties. Standards help clarify expectations for job performance. Standards are important for communicating expectations for group performance and help SAOs take ownership of duties and feel a level of responsibility for the work that is

performed. This extrinsic stimulus is beyond the control of SAOs and contributes to their perceptions of the work environment.

Personal Fit within the Workgroup and Ability to Grow

An important component of the work environment for SAOs is relationships with their workgroups. Given the complex nature of the jobs performed by SAOs, workgroups play an important part in the delivery of services to students. Individual performance can be shaped by one's perceptions of work performance of the workgroup (Hart, Karau, Stasson, & Kerr, 2004). Cohen and Jaffee (1982) explained that SAOs perform better when they perceive others are adequately contributing to the work. When considering the constructs in Figure 3 it becomes apparent when stimuli (observation of coworker performance) are perceived, a judgment is made, and an outcome of performance can be observed. Although Cohen and Jaffee explained some SAOs' performances are impacted by the actions of coworkers, it is important to understand some SAOs' performance does not change regardless of observed performance of workgroups. This is also explained in Figure 3 where SAOs have to make intrinsic judgments based on stimuli presented. Ultimately the outcome of performance is for SAOs to decide. This is why this part of the work environment is considered intrinsic, as SAOs use internal processes to define the way they see the work environment. Therefore, one cannot conclude individual performance is solely tied to perceptions of workgroup performance. For example, observations of behaviors in the workgroup lead SAOs to make judgments about the amount and quality of work performed, supportive workgroup members, and willingness to develop close working relationships. These judgments contribute to SAOs' perceptions of the work environment. It is important to remember workgroups may impact individual

performance of SAOs. Therefore, workgroups should be examined from a holistic perspective when attempting to understand what elements of the work environment influence the performance of SAOs.

Cohesive Work Environments

Many authors have argued that organizational commitment is an outcome of an individual's or group's decisions to work toward organizational objectives based on a match between personal and organizational values (Boehman, 2007; Hunt & Morgan, 1994; Mowday, 1982). The level of commitment impacts the way workgroups perform. One outcome of committed workgroups is working in a cohesive fashion to meet the institution's goals and objectives. A qualitative study found new SAOs who had positive interactions with the workgroup had a positive outlook associated with the work environment (Renn & Hodges, 2007). Some respondents described how these interactions led to a perception of teamwork or cohesiveness, which in turn positively impacted their performance and desire to stay in their position (Renn & Hodges, 2007). Malaney and Osit (1998) insist quality work environments include an absence of fear, where teamwork and cohesion flourish. The outcome of such environments contributes to perceptions of a humane and caring institution promoting a high quality of life (Winter, 1993). In addition, such an outcome can include a shared value of teamwork. Therefore, one could conclude that commitment to an institution plays a role in the cohesiveness of workgroups within SA.

Some workgroups never become cohesive units. An empirical study of SAOs found one of the highest rated concerns related to workgroups was loyalty (Janosik, 2007). Although positive feelings about the workgroup contribute to the development of

cohesive work environments, negative feelings can prevent/destroy the development of cohesive groups. Many SAOs are very hesitant to share information with their workgroups if they perceive the reactions/responses would be negative (Janosik, 2007). This is important, because groups need to have the ability to communicate and seek clarification on issues with each other and the SAL. Group cohesion is a part of the normal process of forming groups. The literature suggests groups can fail to develop while vacillating between progressing and regressing (Gabarro & Lorsh, 1988; Goodacre, 1953). When workgroups fail to develop into positive cohesive units, the outcome yields distrust and possible issues with performance and productivity (Wheelan & Danganan, 2003).

Finally, the level of cohesiveness of workgroups should be considered when attempting to understand the work environment from the perspective of SAOs. When SALs assess the workgroup, problems within the team's performance may be observed. The role of SALs is to determine what is causing the problem. Some problems stem from lack of training, interpersonal conflict, or not having the aptitude to perform the job as desired (Bernardin, 1989). Regardless of the cause, the SAL must act to develop a solution. In a case when aptitude is present, SALs must determine the best approach to develop the skills of SAOs. This is similar for interpersonal conflict. Problems must be dealt with quickly before they escalate. Group cohesion should be included as one of the elements that contribute to the work environment as workgroups are a part of performing SA work. As argued throughout this review, SALs have great challenges when it comes to accurately understanding and positively influencing the work environment of SAOs.

Institutional Culture and Commitment

The work life realities for SAOs often include work weeks extending beyond 40+ hours and involve some evening and weekend work depending on the job classification. Multiple authors have noted SAOs' attitudes and perceptions of the work environment are impacted by the large amounts of time spent performing job duties (Locke, 1983; Sigelman & Shaffer, 1995). Over the course of the work day/week, stimuli from the environment eventually shape SAOs' perceptions. As outlined in Figure 3, stimuli from the work environment are extrinsic constructs, which SAOs often do not control. However, after the stimuli are judged against previously learned events, a perception is developed and an outcome is produced. This outcome represents the level of performance of the SAO. However, it is important to understand how institutional climate plays into the outcome of the development of perceptions and the eventual outcome of performance. This issue is discussed later in this section, as the connection between views of the institutional climate and commitment are explored.

The issue of commitment is an important component of the work environment. Figure 3 outlines commitment as the outcome of a perception. For example, low levels of commitment can be associated with dissatisfaction with supervision, and/or the job, or problems within the work environment. A recent study performed by Clemson University found high levels of employees' commitment did not equate to commitment to stay in a job (Clemson University, 2009). To better understand commitment, it is necessary to understand the reasons why SAOs choose not to be committed.

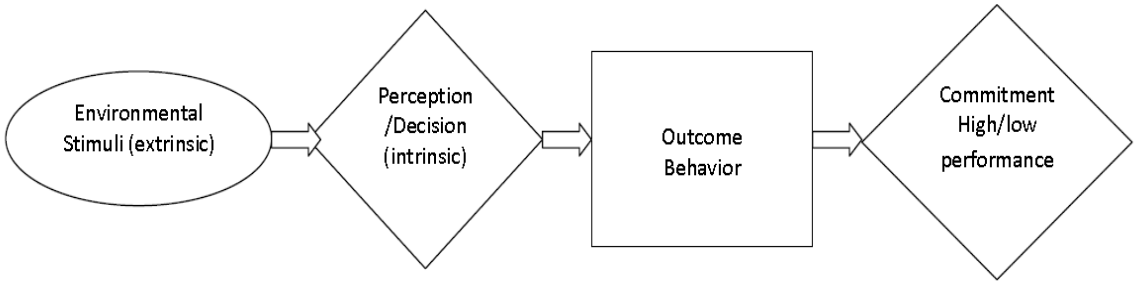

Figure 3. Perception Development Process Including Commitment

Issues that Influence the Reasons Why SAOs Leave their Positions

Student Affairs literature cites multiple reasons why SAOs decide to retain or leave their positions (Lorden, 1998). Four major factors—growth opportunities, burnout, training, and feedback—have been identified as impacting SAOs' decisions to leave their jobs. A study with new SAOs found 39% were satisfied with advancement opportunities (Richmond & Sherman, 1991). Lawing, Moore, and Groseth (1982) argued many SAOs have unrealistic career goals as they define success as advancing until they reach positions as Chief Student Affairs Leaders (CSAL) with titles of dean or vice president/chancellor. Within SA, advancement is seen as an important part of the job. The second most commonly cited factor was burnout. Given the demands, stressful work conditions, and long work days, burnout has been identified as a major issue (Barr, 1992). A third factor cited is the inconsistency of training and development opportunities (Balmores, 1988; Binder, 1980). Limited opportunities for development tend to foster negative perceptions. The fourth factor, feedback and coaching from supervisors, was highly important to SAOs, especially when little was given (Renn & Hodges, 2007). As discussed, coaching is an important component in the development of the relationship between SALs and SAOs and perceptions developed about the work environment. All four factors identified can be influenced through the power and authority given to SALs.

Leaders' Role in Keeping SAOs in their Positions

SALs have the ability to play a big role in retaining SAOs in their positions and encouraging high levels of commitment. One could argue the four cited reasons (growth, burnout, training, and feedback) why SAOs leave their positions could be influenced by SALs. Guido-DiBrito (1995) explained that SALs have the power to make decisions that encourage positive perceptions of the work environment causing higher levels of commitment by SAOs. It is very important for SALs to be aware of how lack of growth opportunities, burnout, training opportunities, and relevant feedback impact SAOs. For example, SALs should be sensitive to the long hours an admissions officer may work during peak recruitment periods. During these periods, SALs can provide compensatory time to offset evening and weekend work. This simple action can go a long way toward development of positive perceptions and can potentially positively impact level of commitment shown toward supervisors (SALs) and institutions (Guido-DiBrito, 1995). Another study highlighted how leaders' actions made a positive impact on SAOs' perceptions of the organization (Wheelan & Danganan, 2003). To underscore the importance of the role of a leader in affecting the perceptions of the SAOs, it is important to remember SALs are responsible for strategic and process components of the institution (Rummler & Brache, 1995). SALs have the power to make changes in the work environment that ultimately produce a positive outcome for SAOs. Therefore, one may conclude SALs influence the SAOs' perceptions and encourage the display of positive behaviors. The actions of SALs can also go a long way in impacting SAOs' choice to be committed.

Institutional Climate

A product of the SAOs' perceptions of the external stimuli combined with views of their workgroup is the personal thoughts about the institutional climate. In this case, the institutional climate is defined intrinsically by SAOs. Climate is often hard to define, however it is very evident to SAOs as it is shaped intrinsically by their perceptions. The institutional climate is a combination of perceptions, norms, relationships, and ways of working (Childre & Cryer, 2000). The climate includes components of the external work environment including supervisory relationship (Gilley & Broughton, 1996), job design (Rummler & Brache, 1995), and institutional design (McManus, 2007). Often the climate impacts how SAOs perceive their fit within the work performed (Chiaburu & Harrison, 2008). As mentioned, some of the highest rated issues that cause SAOs to leave their jobs relate directly to climate. These components are taken into consideration as SAOs develop their perceptions about the institutional climate. Ultimately, perceptions developed based on the climate contribute to the choice to perform at a specified level or to a level of commitment to the institution. To better understand institutional climate, it is necessary to examine the concept of commitment behaviors.

Commitment Behaviors

This section of the review has been building to the elements that produce commitment behaviors in SAOs. Commitment behaviors are an outcome of perceptions about the institutional climate. To provide an operational definition, commitment represents how SAOs perform to align personal values with institutional values and personal goals with institutional goals, which ultimately equate to performance and a desire to stay at the institution (Hunt & Morgan, 1994; Mowday, 1982). Commitment is

an outcome of intrinsic decisions made based on stimuli from the environment (Boehman, 2007) with special consideration given to interactions with the work group and thoughts about the institutional climate. The outcome of commitment is better defined as a behavior and called commitment behavior. Table 3 outlines the major elements of commitment behaviors—adaptability, attitude, and satisfaction—that specifically relate to the field of student affairs.

Table 3. *Constructs Associated with Commitment Behavior*

Commitment Behavior	Definition	Author
Adaptability	Willingness to adjust to meet work circumstances/expectations	Renn and Hodges, 2007
Attitude	Outlook and behavior driven by the perception of the work environment	Cohen and Jaffee, 1982; Janosik et al., 2001
Satisfaction	Level of contentment with the job, "likes job"	Boehman, 2007; Schulte, Ostroff, and Kinicki, 2006

Adaptability describes SAOs' willingness to adapt to changes and work through ambiguity on the job. Attitude is driven by interactions with SALs and workgroups. Thus, negative and positive situations influence SAOs' attitudes. Adaptability and attitude are affected by the SAOs' perceptions of the institutional culture. SALs contribute to the culture as their attitudes and behaviors have an impact on SAOs. In other words, SALs set the tone of the work environment (Meiners & Miller, 2004). SALs who value growth and development encourage SAOs to participate in training activities. The outcome of this encouragement can potentially influence SAOs to feel valued. Ultimately, this may affect SAOs thoughts about burnout and desire to continue their career at the institution and in the field of SA.

The combination of stimuli from the work environment, including interactions with supervisors, workgroups, and other issues, contributes to development of positive and negative perceptions. Thus, if SAOs have positive perceptions of the institutional climate, they will have a good attitude and be willing to adapt to meet the demands of the job. Conversely, if SAOs are dissatisfied with the institutional climate, they may have a poor attitude and be less willing to adapt to the needs of the job. As a result, one can understand how commitment behaviors such as adaptability, attitude, and satisfaction are affected by the institutional culture. Furthermore, these behaviors contribute to SAOs' intrinsic decisions to be committed to the institution.

Conclusion

Perceptions are developed through SAOs' interactions with stimuli from the work environments. Lack of training, burnout, limited growth opportunities, and lack of feedback lead to frustrations with SAOs' relationship to the jobs. These elements of the external work environment, interactions with the workgroup, and views of the institutional climate influence the development of perceptions about the institutional culture for SAOs. The outcome of these perceptions leads to commitment behaviors. These behaviors ultimately influence the SAOs' decisions to stay or leave the institution.

Conceptual Framework

The literature on LOC and perception development shows both intrinsic and extrinsic issues impact the behaviors of SAOs. External LOC represents outside stimulus categories the employee has little or no control over. Extrinsic categories or work environment stimuli represent the relationship with the supervisor (Blau 1987; Landry & Vandenberghe, 2009), job design (Burr & Cordery, 2001; Jaskyte, 2004), and

organizational design (Sims & Szilagyi, & Keller, 1976). Stimuli impact SAOs' perceptions about the work environment. Perceptions are developed intrinsically based on interactions with the workgroup (Ahles & Bosworth, 2004) and views about the institutions climate (Oliver et al., 2006). The outcomes of these judgments lead to observable behaviors of performance and commitment (leaving the institution). Figure 4 provides a visual of the perception development process. This framework provides a basis for the study as it provides five distinct categories that can be examined to better understand the work environment from the perspective of SAOs (relationship between SAL/SAO; job design; institutional structure; fit with the workgroup; and institutional climate and commitment). Individually and collectively, each of the categories provides an area where perceptions can be influenced, ultimately impacting the level of performance and commitment to the work performed.

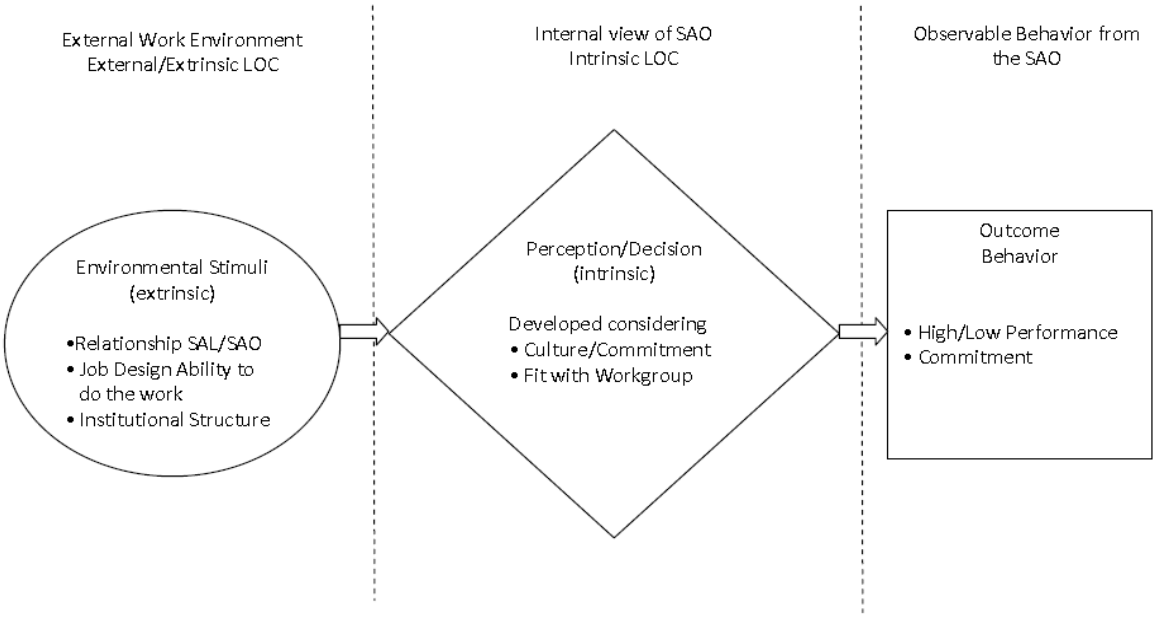

Figure 4. Comprehensive Work Environment Perception Development Process

Answering the Research Question

The aim of this study is to develop and validate a questionnaire. This literature review addresses: "What factors should be included in a questionnaire measuring student affairs officers perceptions of the work environment?" To this point, five broad categories have been identified as important to SAOs' development of perceptions of their work environment. Thus the answer to the question lies in the categories and elements found in Table 4. These categories fit into two major divisions—external/extrinsic LOC (relationship SAL/SAO, job design, and ability to do work, and institutional structure) and internal/intrinsic LOC (culture/commitment and fit with workgroup). Within the five categories are 25 elements. Given the results of the review, the five categories and 25 elements are used to develop a scale to measure perceptions of the work environment. It is important to note that measuring outcomes/behaviors is beyond the scope of this study.

CHAPTER 3: METHODOLOGY

This study is guided by the epistemological philosophical framework of constructivism. The concept of constructivism revolves around the "claim that social processes produce scientific facts" (Kukla, 2000, p. 9). Golinski (1998) explained constructivism is developed through examination of cultures and other observable materials. As constructivism focuses on the development of science through social process, the researcher used this approach in the design of the study. The overall philosophical approach included an inductive exploratory approach to seek a deeper understanding of the work environment. A focus group was conducted with SALs and interviews were conducted with senior student affairs leaders, which contributed to the validation of a questionnaire. The approach to this study is one of constructivism as the researcher shifts to a post-positivist perspective to conduct statistical factor analysis and validation of the questionnaire. This chapter outlines how the constructivist framework drove the study design and includes a description of the participants, variables, instrument development, validity, reliability, and data analysis methods used.

Measures and Variables

Chapter two identified 25 elements to be used in the development of the Student Affairs Officers Work Environment Perception Scale (SAOWEPS). The elements used in the scale are listed in Table 4. Each of the five categories represents different components of the Student Affairs Work Environment. The first category, relationship between the SAL/SAO, contains interactions, participation, and recognition for the work performed. The second category is job design and ability to do the work. This includes how the job is

arranged, resources, development and organization of the work. The third category outlines the structure of the institution, including structure, work expectations, and role of the jobs performed. The fourth category examines the internal perceptions of SAOs. This includes their views of the organizational climate and level of commitment to the job. The fifth category examines SAOs' perceptions of the workgroup including closeness among peers. These categories and their elements uniquely contribute to how SAOs' view their work environment.

Instrument Development

The constructivist approach contributed to the exploratory way the questionnaire was developed. Guided by this approach, the researcher held an informal focus group with five SALs to gain their expert judgment into the categories and elements listed in Table 4. The participants were selected from a group of SALs who supervised more than five employees for a period of five or more years. These SALs worked at public two-year community colleges and four-year institutions. The SALs represented a broad range of student affairs departments including admissions, advising, campus recreation, student life, and a grant funded TRiO program.

The researcher and assistant spent 90 minutes facilitating the focus group. Table 5 outlines the components of the focus group. The researcher used two steps to gain the most information from the expert judges. The first step involved having them write questions they would ask of SAOs, if they were assessing their perceptions of the work environment. The second step was to discuss the questions as a group. This process was used to ensure everyone had an opportunity to participate. After the focus group the assistant collected the sheets of paper containing the questions. Over a month's time, the

researcher reviewed data from the focus group and developed the first draft of a questionnaire.

Table 4. *Categories, Elements, and Authors Used in SAOWEPS*

Category	Element	Authors
Relationship SAL/SAO	Coaching	Renn and Hodges, 2007
	Participation	Guido-DiBrito, 1995
	Feedback	Malaney and Osit, 1998
	Decision Making	Carpenter et al., 2001
	Job Involvement	Guido-DiBrito, 1995
	Recognition	Wilk and Redmon, 1990
Job Design and Ability to Perform the Work	Job Design	McEnrue, 1984
	Tools	Kramer, 1991
	Work Schedule	Kupritz, 2000
	Resources	Becker and Steele, 1995
	Organized	Rapoport, 1982
	Training	Janosik et al., 2006
Institutional Structure	Standards	Malaney and Osit, 1998
	Responsibility	Burkard et al., 2005
	Familiarity	Strubler and York, 2007
	Group Performance	Janosik, 2007
	Expectations	Renn and Hodges, 2007
	Job Importance	Hamlin et al., 2004
Culture/Commitment	Adaptability	Renn and Hodges, 2007
	Attitude	Cohen and Jaffee, 1982
	Likes Job	Schulte, Ostroff, and Kinicki, 2002
	Organizational Climate	Childre and Cryer, 1998
Fit with Workgroup	Workgroup	Janosik, 2007
	Cohesive	Renn and Hodges, 2007
	Aptitude	Bernardin, 1989

After the questionnaire was developed, it was compared to the literature review to ensure alignment between expert judgment of SALs and the literature. The researcher found agreement through this examination process. To improve flow, the researcher

reworded some of the items to improve the readability and quality of the questionnaire. The researcher then met with two Senior Student Affairs Officers (SSAO), who did not participate in the focus group, to receive additional feedback on the questionnaire. The researcher described the study and questionnaire items then asked the question; “What is missing?” Both of the SSAOs provided feedback on the questionnaire. Feedback was used to make refinements as needed.

The researcher presented the questionnaire to a faculty scholar on research methods at the Colorado State University School of Education for feedback. Feedback consisted of identifying typos, improving the readability of items, and suggestions about the structure. The researcher implemented recommendations and developed a refined draft of the questionnaire. After the meeting, two versions with the same wording for items except for references to college or university were created. For example, SAOs at a university would respond to the following item: 51. Resources at my university are abundant. SAOs at a college would respond to the same item with the word university replaced by college. Thus SAOs employed at colleges would receive the version referring to colleges and SAOs at universities would receive the version referring to the universities. This was done to ensure that the questionnaire was specific to the participant. Alreck (2004) explained that questionnaire items worded specifically to the jargon or nomenclature of the population yield better results.

The final questionnaire included 125 items. Each of the 25 elements was characterized with five items. In early drafts of the questionnaire, the elements were grouped into blocks of five items per element. In the final questionnaire, the items were randomized. Lavrakas (2008) explained randomization of items stops respondents from

over thinking about answers producing quality results. This also prevents responses from one item to influence another (Amedeo, Golledge, & Stimson, 2008). Thus these approaches add to the quality of the questionnaire. All of the items were evaluated by respondents as to their agreement on a four-point Likert scale:

SA – Strongly Agree

A – Agree

D – Disagree

SD – Strongly Disagree

The researcher did not add a fifth or middle category. This was due to the desire to have each respondent make a choice related to a range of agreement or disagreement. Converse et al. (2008) explained that forced choice Likert scales encourage participants to provide more truthful answers.

Validity

Validity is "the extent to which any measuring instrument measures what it is intended to measure" (Carmines & Zeller, 1992, p. 17). Given the factor analysis approach, attention to validity occurs before and after the development of the questionnaire. Due to this, validity is discussed throughout the chapter. Other factor analysis studies have used expert judgment as a way to lend content validity to their studies (Dunn, et al., 2008; Lee, 2003); expert judgment is a process where experts in the field assist with the development of questionnaire items (Meyer & Booker, 2001). Expert judgment is an accepted practice supporting the development of content validity. As discussed in the instrument development section, the researcher selected seasoned SALs

to serve as expert judges in the development of questionnaire items. This approach contributes to the content validity of the questionnaire.

Participants

Participants in the study included SAOs with the titles of counselor, advisor, assistant director, associate director, etc. SAOs were selected because they represent 15-20% of the SA workforce who work full time and have between one and five years of experience (Cilente et al., 2006). The others represent SAOs and SALs who have more than five years of experience. SAOs are important because they contribute to the overall development and success of students at institutions of higher education (Waple, 2006). Their role is partially the reason why they were included in this study.

Table 5. *Outline of the Focus Group's Activities*

Time Spent (minutes)	Activity	Outcome
10	Set ground rules for the focus group	Ensure confidentiality of participants
10	Described the study and goals of the group	Educate participants and promote understanding
70	Participants write questions to ask SAOs related to the study categories and discussed answers	Use participant's expert judgment to develop questionnaire items

The focus of the study was to examine the work environment from the perspective of SAOs. SAOs who work at publicly traded proprietary corporate college/universities and institutions serving as business or technical schools are excluded from this study. These institutions award degrees, which may not be accepted at accredited colleges/universities such as Colorado State University. In addition, services provided by

SAOs at proprietary institutions are “narrow” and based on a business approach (McClellan, Stringer, & Barr, 2009, p. 36). The delimitation of participants was done to achieve a homogeneous population where robust statistical inferences could be made.

SALs differ from SAOs as they are responsible for oversight roles including supervision of budgets, departments, and staff (Gordon, Strode-Border, & Mann, 1993, p. 210). Therefore, SALs who provide middle and senior level leadership such as directors, deans, associate/assistant vice presidents/chancellors, and vice president/chancellors (SALs) were excluded from the sample.

Sample Selection

A sample was selected from members of NASPA (Student Affairs Administrators in Higher Education). NASPA was selected because it is one of the major organizations providing professional development, networking opportunities, and publication of multiple scholarly journals for SA personnel. The researcher contacted the organization in June 2009 to verify a list of members could be obtained and that over 625 members met requirements for the study. NASPA had an accessible population of 2,300 SAOs who met the criteria.

The researcher selected a sample of 1,832 or 79% to ensure an adequate number of responses. This sample size is more than double the minimum sample size used in other studies. A number of studies had response rates ranging between 30-40% (Eid & Abdel-Khalek, 2008; Foong et al., 2007; Muthen, Hasin, & Wisnicki, 1993). A larger sample yields better results and supports the use of exploratory factor analysis (EFA).

De Winter, Dodou, and Wieringa (2009) explained exploratory factor analysis is usually done with large sample sizes with a minimum number of 50. The best sample

sizes should be at least 100 and closer to 1,000 when using EFA (MacCallum, Widaman, Preacher, & Hong, 2001). A number of authors argued minimum sample size for EFA should be no less than four to five subjects per item (Gorsuch, 1983; Floyd & Widaman, 1995). Thus, given the 125 items on the SAOWEPS questionnaire, a minimum sample of 625 (125 items X 5) is needed. Using EFA with sufficient respondents underscores the researcher's rationale for seeking a large sample. The aim is to have a large enough sample size to conduct factor analysis.

To strengthen external validity, the researcher considered additional issues when selecting the sample size to strengthen the generalization of results. Farrington (1980) explained "external validity" … as a process… "to the generalization of results to real life" (p. 184). In addition, Anderson and Laake (1998) argued large sample sizes reduce error associated with variables. A number of additional reasons led to the researcher's decision to increase the initial sample size as a way of increasing the external validity and ensure adequate responses. Table 6 outlines three major reasons for using a large selected sample size. Each of the three reasons (outliers and sufficient size for accurate loadings) was seen as important to the quality of the study.

Table 6. *Rationale for Using a Large Sample Size to Increase External Validity*

Reasons for Large Sample	Authors
Outliers have a limited effect on large samples	Jamshidian and Mata, 2008
Small sample size limits findings of the study	Froehlich-Grobe, Andresen, Caburnay, and White, 2008
Larger sample sizes contribute to more accurate factor loading	Ximénez, 2006

On February 1, 2010 the researcher received a list of 2,323 NASPA members who met the eligibility requirements for the study. The list included members' names, titles, and institutional affiliations. The list was reviewed for accuracy, which included a review of each name and title to ensure each met the specified title criteria. The researcher used random systematic selection to identify a sample of 1,723. According to Weisberg, Krosnick, and Bowen (1996) random systematic selection begins with selecting a random number to choose the first person on a list, "then a specified number of names" are skipped to choose the next person until the end of the list, representing a final list of names (p. 44). Next the researcher logged onto the NASPA website and copied each of the selected sample members' e-mail addresses into a database. This yielded a database of 1,723 names, titles, institutional affiliations, and e-mail addresses. The database was separated into two lists by SAOs who worked at colleges and who work at universities. Both lists (college and university) were uploaded into SurveyMonkey for distribution.

Data Collection

Human subjects approval for this study was granted in January 2010, and collection of data began in February 2010. A copy of the approval is provided in Appendix A. The SAOWEPS questionnaire was posted on the SurveyMonkey website in January 2010 and activated in February 2010. Two weeks prior to the study, a group of 100 SAOs (50 from universities and 50 from colleges) were surveyed to test the introduction letter and survey link. The results from the pilot were used to make final changes to the link and introduction letter. The questionnaire was activated on February 8, 2010 ending on February 26, 2010. This time frame was chosen because it is the most common non-peak time for SAOs. One week prior to access of the link, each SAO

received a personalized e-mail informing them about the questionnaire. On February 26, 2010, the researcher sent the sample an introduction e-mail containing a link to the questionnaire (see Appendix A). The respondents were given four weeks to complete the questionnaire online. At the beginning of each week, SurveyMonkey sent a reminder e-mail to participants who had not taken the questionnaire. Three days before the questionnaire was deactivated, a final e-mail reminder was sent.

Data Analysis

All data analysis was done with SPSS 16 statistical software. Reliability is a process used to ensure questionnaire responses can be attempted multiple times with similar results (Salkind, 2006). The most commonly used measure of reliability is the Cronbach's alpha (CBA), which measures the internal consistency of questionnaire items (Cronbach, 1951). Aleamoni (1981) explained internal consistency of questionnaire items is composed of the score and error within the responses. To ensure the study produces reliable results, the researcher used CBA to measure reliability.

This phase of the study shifted from constructivism to post-positivism where traditional statistical approaches were used to validate the questionnaire. Parry, Gnich, and Platt (2001) explained the post-positivistism epistemology includes statistical methods tailored to social science approaches to answer research questions. This fits well as the researcher used factor analysis (FA) in the developing and examining of the SAOWEPS questionnaire. Factor analysis is used for the following reasons: (a) to determine connections between constructs among variables; (b) determine how many constructs are needed to explain the intercorrelations between variables; (c) determine if constructs were impacted by the way measurements were taken; and (d) test the

reliability and revalidate data (Comrey & Lee, 1992). For the purpose of this study, the researcher chose to use exploratory factor analysis (EFA) to validate the questionnaire.

Responses from 702 participants were used for EFA. Many researchers argue EFA is an effective approach to examine construct validity (Harman, 1976; Kerlinger, 2000). This process was used to reduce the 125 items into factors and analyze the reliability of the factors. Item reduction was accomplished by removing the low items in the correlation matrix created by the EFA. Low items suggested poorly worded items or items which did not measure the intended factor. The goal was to develop a questionnaire with items measuring the desired constructs.

During the EFA, factor loadings were examined to determine each items measurement of the construct. Harman (1976) provided the following operational definition for factor loadings used for this study:

> …common factors account for the correlations among variables, while each unique factor accounts for the remaining variance (including error) of that variable. The coefficients of the factors are frequently referred to as “loadings” (p. 15).

Based on this definition, data were examined and listed from the highest loading to the least. Statistical factor loadings range from +1.0 to -1.0. Loadings closer to +1.0 show the factor is measuring the construct. When evaluating scores of loadings, Morgan, Gliner, and Leech (2009) explained “factor loadings lower than .30 or .40 are considered low” … while “loadings of .40 or greater are typically considered acceptably high” (p. 22). Other studies have set minimum loadings at .30 to .40 (Culhane & Taussig, 2009; Orpen, 1995; Rahim & Magner, 1996). Based on the literature, with a large sample, .40 is more

acceptable and robust for minimum loading for factors. The minimum level for this study is set at .55, based on an argument posed by Hair, Anderson, Tatham, and Black,

> "factor loadings greater than +.30 are considered to meet the minimal level; loadings of +.40 are considered more important; and if the loadings are +.50 or greater, they are considered practically significant." (1995, p. 111).

Tse-Hua and Xitau (2008) also set loadings at .55 in their study based on practical significance. Final loadings provide evidence to ensure the content (questionnaire items) measures the identified factors. In an effort to further reduce the number of items, a correlation matrix was used to identify factor showing high relationships above .80. Table 7 outlines the steps used to remove items. eigenvalues below 1.0 were rejected. Palmer and Binks (2008) explained eigenvalues over one explain the amount of variance between variables.

Table 7. *Steps to Remove Items from the Correlation Matrix*

Step	Process
1.	Items correlating at <.80 and above are identified in the correlation matrices.
2.	Examine the wording of each item to ensure they are measuring the same idea. Items measuring two different ideas are not removed.
3.	Items with the lowest Rotated Matrix score in Table 17 are removed. Items with lower scores removed from the Rotated Factor Matrix contribute to an overall higher Cronbach's alpha for the questionnaire.

Reliability

Reliability is a process used to ensure questionnaire findings can be applied multiple times with similar results (Salkind, 2006). The most commonly used measure of

reliability is Cronbach's alpha (CBA), which measures the internal consistency of questionnaire items (Cronbach, 1951). Aleamoni (1981) explained internal consistency of questionnaire items includes a combination of the score and error within the responses. To ensure the scale produces reliable results, the researcher uses CBA to measure reliability for the factors. Morgan et al. (2009) explained alpha scores below .80 should not be considered for items to be consistent. Given the literature, the researcher set minimum CBA at .80 to ensure the consistency of the questionnaire. .

Research Question Four

The final research question asked if there is a difference in work environment perceptions between SAOs who have one to four years of work experience versus those who have five or more years experience in the field. The variable is the number of years SAOs worked in the field. The decision for the years of experience categories is based on a study with SAOs which found within the first five years of employment 50% to 60% make a decision on whether to maintain a career within the field (Tull, 2006). This question was answered based on the newly derived factors identified through factor analysis. These validated factors provided a basis for evaluating the difference in perceptions. The test instrument examined if there was a difference among the extrinsic categories including relationship between SAL/SAO, job design, and ability to do the work, and organizational structure and intrinsic categories including perception of organizational culture, commitment, and fit with the workgroup) aspects of the work environment. The null and alternative hypotheses for the study follow:

***H*0:** $\mu_{\text{SAOs 1-4 Years}} = \mu_{\text{SAOs with 5+ Years}}$ there will be no difference between workplace perceptions of SAOs who have one to four years of experience and those who have five or more years of experience by factor.

***H*1:** $\mu_{\text{SAOs 1-4 Years}} \neq \mu_{\text{SAOs with 5+ Years}}$ there will be a difference between the workplace perceptions of SAOs who have one to four years of experience and those who have five or more years of experience.

The independent variable was the SAOs' overall perceptions of the work environment by newly identified factors. A table of descriptive statistics was included to describe the data. The researcher used an Independent Samples *t* test to test the hypothesis. A significance level of $p < .001$ was set for the *t* test. Effect sizes were used to explore the strength of the difference (if found). Additional analysis will explore three groups (1-4, 5-10, and 11+ years in the field) using a one way ANOVA test. According to Cardinal and Aitken (2006) ANOVA is used to "predict a single dependant variable based on one or more predictor variables, and to establish whether those predictors are good predictors" (p. 4). If an ANOVA is used, the dependent variable is years in the field and the predictor variables are the factors identified through factor analysis.

The statistical analysis listed in this chapter will yield a valid and reliable questionnaire. In addition, data from the validated questionnaire are used to answer the research question. The following chapter outlines the findings.

CHAPTER 4: FINDINGS

The purpose of the study was to identify what aspects of the work environment impact SAOs perceptions. Through a review of the literature, five categories and 25 elements were identified impacting the work environment. From the literature, a questionnaire was developed and administered to SAOs. After the data were collected, exploratory factor analysis was used to identify factors from the items in the SAOWEPS questionnaire. To explore the data from the SAOWEPS questionnaire, internal consistency estimates and intercorrelations among the resulting factors were calculated and the factors were analyzed for reliability. An Independent Samples *t* test was also conducted on the validated data. The following section outlines findings from the analysis of data.

Sample

During the month of February 2010, 1,723 SAOs were invited to respond to the SAOWEPS questionnaire. Of those invited, 702 SAOs responded, yielding a 41% response rate. According to a meta-analysis conducted by Tse-Hua and Xitao (2008), the average response rate for online surveys is 34%. The researcher contributes the response rate of this study to three reasons. First, NASPA members are very engaged in their work and are more willing to participate in research contributing to the advancement of the field. The second reason relates to the timing of the questionnaire. The questionnaire was administered between the start of the academic semester/quarter and spring break. Traditionally this is lower work demand time for SAOs. Finally, all respondents had the opportunity to enter a drawing for one of five $20 Visa gift cards. A monetary incentive

is considered to have an impact on the response rate (Edwards, Cooper, Roberts, & Frost, 2005).

The sample consisted of 190 males (27%) and 512 females (72%). Of the ethnic groups, 101 participants were African American (14%), 35 were Asian (5%), 3 were American Indian/Alaskan Native (0.4%), 478 were Caucasian (67%), 48 were Hispanic (6%), 20 were Multiracial (2%), and 17 were classified as other (2%). The age distribution consisted of 295 SAOs 30 years old or younger, 265 were 31-40, 87 were 41-50, 48 were 51-60, and 7 were 61-70 years old. For education level, 70 had bachelors, 583 masters, 46 with doctorates, and 3 had professional degrees. All of the participants worked in the United States at public or private funded institutions. In terms of years in their current position, 91 SAOs had less than one year, 221 had one to two years experience, 217 had three to four years, 85 had five to six years, 45 had seven to 10 years, 29 had 11-15 years, and 14 had 16 or more years of experience. Within the group 215 SAOs had 1-4 years of experience, 322 had 5-10 years experience, and 165 had 11+ years experience. In relationship to SAOs time with the current supervisor, 130 had less than one year, 262 had one to two years, 173 had three to four years, 79 had five to six years, 35 had seven to 10 years, 16 had 11-15 years, and 7 had 16 or more years of time spent.

The Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) test was done on the 702 responses. The KMO test is designed to measure variance of variables and underlying factors within the data (Rasli, 2006). The KMO test yielded a score of .968. According to Field (2005), scores above .900 are considered “superb” for the adequate number of responses needed to perform EFA. High values on the KMO test lend to the robustness of loadings when using EFA (p. 640).

Determining the Number of Factors

The first step in the process was to determine the number of factors. A Scree Plot was used to identify factors. According to Netemeyer, Bearden, and Sharma (2003) when examining the Scree Plot, factors below the elbow or break can be deleted without impacting the variance. Appendix D provides a copy of the Scree Plot used in this study. In Table 8, of the five factors, eigenvalues ranged from a high of 37.09 to a low of 3.075. The five factors accounted for 43% of the variance for all factors. Thus, the number of factors for this study is five.

Table 8. *Eigenvalues and Total Variance Explained for Five Factors and 61 Items*

Factor	Extraction Sums of Squared Loadings		
	Total Eigenvalue	% of Variance	Cumulative %
1	37.095	29.676	29.676
2	5.542	4.434	34.110
3	4.823	3.858	37.968
4	3.615	2.892	40.860
5	3.075	2.460	43.320

Identifying Items in Each Factor

The next step in the EFA is to examine how items load in the factor matrix. The rotated factor matrix is used to "interpret factors," … "determine the number of factors to use, and name the factors" (Lester & Bishop, 2000, p. 42). The purpose of the matrix is to show how each item loads with each factor (Kachigan, 1991). In this step, two tables are examined, a factor matrix and a rotated factor matrix (both tables are in Appendix D). All factors are rotated using Varimax Rotation. Kent and Lancour (1973) argued the factor matrix does not yield good results as true loadings are derived from a rotated factor

matrix. The rotated matrix shows the structure of the items in each factor (Gorsuch, 1983). Therefore, the researcher used the rotated factor matrix to identify the items to be tested for Reliability Item Analyses.

The rotated factor matrix used in this study presents the simplest structure to allow for interpretation of factors (Gorsuch, 1983). This structure is evident in the rotated factor matrix in Appendix D, as it shows the rotated factors in the matrix with items loading below .55 removed. Factor 1 contains 22 items relating to the interactions and outcomes of the supervisor and employee relationship. Informed by Table 4, the researcher used a category title to name the factor 'Relationship between SAL/SAO' (Relationship). Factor 2 contains 16 items relating to the design of the job and elements necessary to perform job duties. This factor fits well with a similar category in Table 4. The researcher used the category title of 'Job Design and Ability to Do the Work' (Job Design) for Factor 2. Factor 3 contains 10 items relating to satisfaction and willingness to perform job duties. This factor does not fit with the categories in Table 4. The researcher named this factor 'Job Engagement and Satisfaction' (Engagement). Factor 4 contains six items relating to interactions within workgroups. This factor is not an obvious fit any of the categories in Table 4. The researcher named this factor "Workgroup Effectiveness" (Effectiveness). Factor 5 contains seven items relating to attitude and organizational climate. This factor is also not a clear fit with the categories identified in Table 4. The researcher called this factor 'Organizational Climate and Commitment' (Climate). The emergence of the five factors encompassed 61 items, a reduction from 125 items in the test questionnaire.

Correlations between Items

In an effort to further reduce items, an Item Correlation Matrix was developed for the five newly formed factors and 61 items. Items with correlations < .80 were examined for possible removal. High correlations signify a strong association between two items. High correlations also suggest the need for further examination and possible item removal. The process for removing items is outlined in Table 7.

A two-tailed Pearson Correlation Matrix was run with *p* set at .001. Using the steps outlined in Table 7, the researcher identified four items (in the matrix) for further examination. Each of the two correlations was significant at $p = .001$. The first two items for analysis are RecognitionQ95 and RecognitionQ107, which have a correlation of .849, see Table 22. Both items were in Factor 1 and have a close relationship to how the process of recognition is used in the work environment. Given the similarities in items, the researcher looked at the Rotated Matrix table to see how each item loaded. Item Q95 has a score of .689 and Q107 a score of .699. Item Q95 was removed due to the lower Rotated Matrix Score. Factor 4 also has two items with a high correlation, see the correlation matrix in Table 25. The items are Q113 and Q101, which have a correlation of .812. In an examination of the wording for each item, both relate to the level of cohesiveness SAOs bring to their jobs. Items have Rotated Matrix scores of .715 for Q113 and .701 for Q101. Given the lower score of .701, Q101 was removed. The removal of these two items yielded a final questionnaire of 59 items. All correlation matrices are included in Appendix D.

Reliability and Item Analysis

The second part of EFA is to examine the reliabilities of the newly identified factors and items. This process yields a table for each factor including Cronbach's alphas, mean scores, variance if deleted, corrected item-total scores, and Cronbach's alpha score if deleted. The Cronbach's alpha explains the reliability of factor scores. Morgan et al. (2009) explained alpha scores above .80 are considered high for statistical research. Given this, scores below .80 are not considered in this study.

Another aspect of the reliability measurement process is examination of the inclusion or exclusion of items on the factor. This process includes a table of corrected item-total correlations. Leech, Barrett, and Morgan (2005) explained that the columns of corrected item-total correlation and of Cronbach's alpha with item deleted columns in an item-total statistics table contain the most useful information. The table is helpful in allowing the researcher to remove items showing correlations below .40. When correlations are below .40, the table shows how much Cronbach's alpha increases if an item is removed. According to Pallent (2007), item-total correlations below .30 are not acceptable and should be removed. Low values indicate the item should be examined to make sure it is measuring the same thing as the identified factor (Howitt & Cramer, 2005).

Factors 1 through 5 all had Cronbach's alphas of .965, .926, .894, .907, and .848, respectively. Table 9 outlines the Cronbach's alphas and alphas if items are deleted. All five scores point to high reliabilities within each factor. After examining each of the items within the variable, the researcher kept all items within each factor. This resulted in the SAOWEPS questionnaire with 59 items.

Table 9. *Item Total Statistics, Five Factors*

Item-Total Statistics				
Item	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Factor 1 Relationship, N = 22, α = .965				
Q9	42.65	149.690	0.780	0.963
Q12	42.39	148.055	0.795	0.963
Q52	42.53	148.307	0.809	0.963
Q96	42.45	149.683	0.786	0.963
Q88	42.61	149.205	0.789	0.963
Q72	42.08	148.238	0.754	0.964
Q33	42.59	148.988	0.751	0.964
Q107	42.48	149.739	0.757	0.964
Q19	42.60	149.950	0.739	0.964
Q4	42.80	148.453	0.734	0.964
Q95	42.47	148.906	0.756	0.964
Q21	42.85	150.447	0.750	0.964
Q111	42.30	150.266	0.697	0.964
Q65	42.66	149.398	0.727	0.964
Q94	42.68	150.550	0.729	0.964
Q47	42.14	149.539	0.672	0.965
Q34	42.71	151.474	0.724	0.964
Q42	42.73	151.959	0.718	0.964
Q58	42.81	150.937	0.691	0.964
Q62	42.43	151.132	0.681	0.964
Q103	42.78	153.248	0.692	0.964
Q91	42.30	151.514	0.662	0.965
Factor 2 Job Design, N = 16, α = .926				
Q43	32.03	39.687	0.753	0.919
Q79	31.97	39.978	0.713	0.920
Q28	32.05	39.806	0.709	0.920
Q104	31.97	40.000	0.700	0.920
Q81	31.82	40.063	0.649	0.921
Q11	32.02	39.855	0.676	0.921
Q39	32.12	40.990	0.690	0.921
Q75	31.41	39.777	0.570	0.924

Q40	32.08	40.354	0.670	0.921
Q108	31.91	39.831	0.604	0.923
Q78	31.77	39.557	0.561	0.925
Q3	31.76	39.421	0.647	0.922
Q46	32.06	40.460	0.607	0.923
Q112	31.95	41.220	0.592	0.923
Q69	31.70	40.415	0.550	0.924
Q32	32.03	40.309	0.633	0.922
Factor 3. Engagement, N = 10, α = .894				
Q92	14.93	14.446	0.676	0.882
Q121	14.95	14.473	0.673	0.882
Q89	14.7	14.198	0.654	0.883
Q90	14.74	14.089	0.69	0.88
Q85	14.61	13.976	0.638	0.884
Q77	14.68	14.297	0.598	0.887
Q100	14.62	14.363	0.622	0.885
Q86	14.62	14.104	0.633	0.884
Q120	14.83	14.243	0.644	0.884
Q66	14.61	14.796	0.558	0.889
Factor 4. Effectiveness, N = 6, α = .907				
Q113	9.53	7.978	0.816	0.878
Q125	9.74	8.378	0.793	0.882
Q101	9.61	7.941	0.830	0.876
Q17	9.81	8.644	0.720	0.893
Q115	9.76	8.736	0.663	0.901
Q82	9.93	9.473	0.639	0.904
Factor 5. Climate, N = 7, α = .848				
Q80	11.54	7.938	0.679	0.817
Q83	11.58	8.041	0.641	0.822
Q114	11.40	8.178	0.618	0.826
Q124	11.41	8.234	0.590	0.830
Q24	11.59	8.183	0.586	0.830
Q41	11.75	8.513	0.590	0.830
Q25	11.60	7.878	0.562	0.837

Answering the Research Questions

Given the statistical analyses performed, the two research questions related to the reliability and validity of SAOWEPS can be answered. The second of four research questions asked how reliable the questionnaire was. This question is answered by the high total Cronbach's alpha score of .962 for the 59 items. In addition, the Scree plot clearly outlines the existence of five factors, and Table 10 shows the 59 items with 52.3% variance explained with the five factors. Finally, through an examination of each factor, high Cronbach's alphas ranging from 965 to .848 are observed. Thus, the conclusion is SAOWEPS is reliable.

Table 10. *Total Variance Explained, n = 59 Items*

Factor	Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative%
1. Relationship	18.907	32.046	32.046
2. Job Design	3.958	6.709	38.754
3. Engagement	3.437	5.825	44.579
4. Effectiveness	2.754	4.668	49.247
5. Climate	1.731	2.934	52.181

In terms of validity, the questionnaire used expert judges to develop the items. Secondly, the Factor Score Covariance Matrix speaks to the internal consistency of the factors within the questionnaire, see Table 11. As outlined in the tables in Appendix D, Factors 1-5 have high scores when examined together. Values below .70 are considered undesirable (Morgan et al., 2009). In addition, no instances exist where two factors showed high correlations. For example the range of correlations in Table 11 shows a correlation of .015 between Factors 4 and 2. The between paired Factors (1-5) show low correlations ranging from -.007 to .044. Thus, we can be confident each factor measures a

construct and has internal consistency. After a review of the $n = 59$ items, face validity is established as the tool measures perceptions of the work environment. Finally, given the overall Cronbach's alpha score of .978 and high covariance scores listed in Table 11, high internal consistency within SAOWEPS establishes its validity. Tables in Appendix D show the 59 items in SAOWEPS and those removed from the test instrument.

Table 11. *Factor Score Covariance Matrix*

Factor	Factor Score Covariance				
	1	2	3	4	5
1. Relationship	.951				
2. Job Design	.022	.940			
3. Engagement	.017	.006	.911		
4. Effectiveness	.015	.015	.044	.901	
5. Climate	.014	.004	-.007	.005	.887

Note: Extraction Method: Alpha Factoring, Varimax Rotation with Kaiser Normalization.

Independent Samples *t* test with the Validated Questionnaire

After SAOWEPS was shown to be valid and reliable, Independent Samples *t* tests were conducted with SAOs with 1-4 years and 5+ years of experience to see if differences in work environment perceptions existed for each of the identified factors. The null and alternative hypotheses are as follows:

***H*0:** $\mu_{\text{SAOs 1-4 Years}} = \mu_{\text{SAOs with 5+ Years}}$ there will be no difference between workplace perceptions of SAOs who have one to four years of experience and those who have five or more years of experience by factor.

***H*1:** $\mu_{\text{SAOs 1-4 Years}} \neq \mu_{\text{SAOs with 5+ Years}}$ there will be a difference between the workplace perceptions of SAOs who have one to four years of experience and those who have five or more years of experience.

Table 12 shows the results of the five Independent Samples *t* tests. The minimum significance level was set at < .001 for all tests, given the large number of respondents. As noted in Table 12, of the five factors the Levene's test for equality of variances for each test was not significant at $p < .05$, meaning the assumptions are not violated and equal variances are assumed. Thus, the alternative hypothesis is rejected for each of the five factors as no statistical differences were found. Therefore, the conclusion with 99% confidence is, there is no difference in perceptions between SAOs based on years of experience.

Table 12. *Comparison of Years of Experience Including t test Statistics*

Factor	1-4 years experience			5+ years experience				
	N	M	SD	N	M	SD	t	Sig
Relationship	216	41.0	12.0	486	43.1	12.3	-2.174	.588
Job Design	216	34.3	6.8	486	33.9	6.7	0.652	.512
Engagement	216	16.5	4.6	486	16.1	4.0	0.431	.054
Effectiveness	216	10.0	2.9	486	10.0	2.8	0.504	.360
Organizational Climate	216	13.2	3.3	486	13.6	3.3	-1.511	.980

Further Data Analysis with a One-Way ANOVA

Given the lack of significance found with the Independent Samples *t* tests, a one-way ANOVA was conducted on these data. The demographic variable of years of experience was split into three groups by years (1-4, 5-10, and 11+ years experience being an SAO) for deeper analysis of data. The reason why the 5+ group was split is based on the larger combined number of the two groups (487) and the wide range of years (5-11+) when compared to the smaller group of 215 SAOs with 1-4 years of experience. The test revealed, with an overall number of participants $N = 702$, for SAOs

with 1-4 years of experience, n = 215 (M = 41.12, SD = 11.90), for SAOs with 5-10 years of experience, n = 322 (M = 43.33, SD = 12.30), and n = 165 (M = 42.55, SD = 12.40) for SAOs with 11+ years of experience. An analysis of the data shows Factors 1-5 did not have a significant difference among the groups. The significance levels are .122, .266, .248, .475, and .019 respectively.

In answering the research question, the data show no difference in workplace perceptions of SAOs with the group with one to four years and those with five or more years of experience. In addition, a one-way ANOVA found no significant differences between SAOs with 1-4, 5-10 and 11 or more years of experience. Although findings were significant, the SAOWEPS was used to measure work environment perceptions of the sample. The implications of this are great as SAOWEPS can be used by SALs to better understand SAOs. Ultimately this meets the underlying goal of the researcher to make a contribution to the field, by providing SALs with a valid and reliable instrument to help them better understand their employees.

CHAPTER 5 DISCUSSION

The purpose of the study was to design and validate a questionnaire to measure SAOs' perceptions of their work environment. The test instrument was developed based on a review of the literature and input from a focus group with SALs. The instrument of 125 items was given to 1,723 SAOs. Exploratory factor analysis was used to remove items and validate the questionnaire. Responses from the validated questionnaire were used to examine differences between groups of SAOs based on years of experience.

The following section discusses the findings from the study. This includes a discussion of the process used to reduce items, the significance of the findings, and the connection between categories, items, and factors. The researcher outlines potential future publications and limitations. The chapter concludes with recommendations for use of SAOWEPS and recommendations for the field of SA.

Reduction of Items

The process used to reduce items yielded a questionnaire with 59 items. The final questionnaire included significant items from the rotated factor matrix, loading above .55. Table 13 shows the categories, elements, factors, and significant items post EFA. After the use of EFA, 24 of the 25 elements identified through the review of literature were kept.

One element, training was not included. As outlined in chapter two, training is a very important component of SAOs' ability to perform job duties. Although training was found through the literature review to be an important aspect of the work environment, the study found differently. The element of training loaded below the minimum level.

The items associated with Training were Q7, Q30, Q54, Q55, and Q118, their rotated factor scores were .506, .515, .513, .502, and .357, respectively. Given these scores and the minimum level set by the researcher, all items related to training were excluded from the final questionnaire. As an overall element, training can be highly variable, institution specific, and multifaceted. Janosik et al. (2006) explained how training occurs from multiple modes including webinars, conferences, in-house training, and on the job training. In addition, Winston et al. (2001) argued training within the field of SA is inconsistent. Given the wide array of modes of training and the lack of consistent training, it becomes challenging to ask generalized questions about training and development. Therefore, it is understandable how SAOs may not be consistent when asked to rate statements related to the complex concept of training.

An SAO from an institution with limited resources may not have an opportunity to attend conferences and participate in developmental opportunities. Given the inability to participate in training, he/she may have a specific view of training. In contrast, an SAO from a more resourceful institution may have the opportunity to participate in many conferences and multiple training activities. The latter SAO's view of training differs from the other SAO. When examined together, each SAO has differing perceptions and experiences of training (Leavitt, 1988). The researcher suspects the lack of common experiences probably contributed to the lower loadings of the items related to training. Therefore, the researcher recommends the concept of training be addressed with another questionnaire tooled specifically for training or a qualitative study examining training in specific SA units.

Another observation from the item removal process was identification of elements which fit into multiple factors. Four elements loaded into multiple factors: expectations (Relationship and Job Design), attitude (Job Design and Climate), job importance (Relationship, Engagement, and Climate), and job involvement (Relationship and Climate). These loadings show the items are more multifaceted than the assertions made by the literature review. As a caution, these new factors do not suggest the elements identified in the literature are wrong; however, it suggests the data derived from the study are the best fit with the factor structure identified through EFA. Therefore, given the findings, the five factors relate specifically to the general work environment for SAOs.

Significance of the Findings

The study used an independent samples *t* test and a one-way ANOVA to analyze data. The *t* test found no significant difference between SAOs with one to four (1-4) years of experience and five or more (5+) years of experience for Factors 1-5, $p = .588$, .512, .054, .360, and .980, respectively. When the SAOs were split into three groups (1-4, 5-10, and 11+ years experience as an SAO) no significant differences were found for Factors 1-5, $p = .122$, .266, .248, .475, .019 respectively. The lack of significant findings presents an opportunity for further discussion.

One might assume perceptions for all factors with SAOs with 1-4 years would be different than those with 5+ years of experience; however, the data do not support this assumption. Although significance was not found, the researcher has some thoughts about the findings. The thoughts relate to homogeneity of the sample, nature of the sample, and economics.

Homogeneity

Within the field, professionals have various reasons for participation. As the nature of the field relates to helping others, one may assume SA professionals who participate in the field may connect with that approach. This notion is supported by Judi Diaz Bonacquisti, who is Associate Vice President for Enrollment Services at Metropolitan State College of Denver. In a personal conversation she says, “most people in the field” …of SA… “are drawn here for a reason” … “I am here because I want to make a difference for students” (Diaz-Bonacquisti, 2010). Her statement speaks to SAOs being drawn to the field based on their desire to help or make a difference in the lives of others. This is important to keep in mind when considering the findings from the study.

As NASPA was developed by SA professionals for SA professionals, it is not unreasonable for one to assume a collective attitude of helping others/students would be observed among members. A major focus of NASPA is to improve the membership through a variety of services to help professionals make a difference for students. According to NASPA’s website, one of the organization’s strategic objectives is to “support students' needs through advocacy efforts at local, state and national levels” (Student Affairs Administrators in Higher Education, 2010). Given the focus of the organization, one may assume the collective culture of members from a practical perspective tends to be like minded or homogeneous.

Since NASPA is an organization where participation is a choice (not mandatory) and members join to participate, members may be seen as like minded. This is supported by Blimling (2003) who suggested the culture of NASPA membership is homogeneous. Culture is defined as a collection of norms, beliefs, values, and behaviors existing within

an organization or group (Riggio, 2004). A study by Randall (2007) found SAOs were committed to their jobs due to their helping role. Thus, the same may be true for SAOs who join NASPA. Given this, the research argues findings may contribute to the like mindedness or practical homogeneity of the NASPA culture and group of members who participated in the study.

Nature of Sample

An additional reason for the similarity of scores by years of experience relates to the nature of the sample. SAOs who participate in NASPA are engaged as they (a) sign up for membership and (b) participate by choice. It would be possible to assume they are engaged and may tend to stay in the field five or more years. This study did not sample SAOs who did not choose to participate in NASPA, thus, nothing is known about the perceptions of nonmembers. Therefore, it may be hard to interpret findings further given the absence of this group.

Economy

Although economics is an external factor, it is wise to consider the impact of external factors (Gilley & Maycunich, 2000) when trying to understand findings from the study. When the stock market crashed in 2007, many employees lost thousands in retirement dollars. A study conducted by TIAA-CREF, a retirement organization catering to higher education, found 37% of SA personnel indicated plans to delay retirement (Chronicle of Higher Education, 2009). This externality may have influenced SAOs to stay in positions longer than planned. In some cases, financial hardship can motivate SAOs to stay in positions longer than expected as options for other positions or fields do not exist. This is an important point as the majority of the sample, $N = 720$, ranged from

younger than 30 to 40, *n* = 560, or 79%. Given the economy, it would be wise for an SAO to stay in the field until the economy changes and better job opportunities arise, regardless as to how they feel about culture and commitment to their jobs. Thus, the economy may contribute to more of like mindedness among members. As this is an outside factor not measured by the items in SAOWEPS, the researcher speculates that it may have impacted the results of the study.

Conclusion

Given the three potential reasons (homogeneity, nature of sample, and economy) offered by the researcher to explain the non-significant findings), one can speculate on how these issues may have impacted the findings. A more important aspect of the findings is that the use of SAOWEPS was consistent across years of experiences. The potential for the questionnaire is great as it can be used to measure significant findings related to work environment perceptions.

Connection between Categories and Items and Factors and Items

The five factors identified by this study include items related to the intrinsic and extrinsic components of the work environment. As identified by the review of literature, both intrinsic and extrinsic speak to employees' perceptions of the amount of control exhibited in the work environment (Treven & Potocan, 2005). Thus, intrinsic elements are in SAOs' control (Linz & Semykina, 2008) and extrinsic elements are out of SAOs' control (Itzhaky & Ribner, 1999). In each factor, one can see how each grouping includes a range of items, both in and out of control of SAOs. The interesting observation is how all factors with the exception of Factor 4, Workgroup Effectiveness, have a combination of intrinsic and extrinsic elements. The Workgroup Effectiveness factor contains

elements related to the extrinsic work environment. The findings differ from the categories and elements in Table 4 (discussed in the section relating to the factor). In simpler terms, the study shows how aspects of intrinsic and extrinsic components impact all aspects of the work environment in a seamless and integrated way (see Table 13). The five factors are outlined below.

Relationship between the SAL/SAO. This factor describes the impact of the relationship existing between the SAOs and SALs. Components of the relationship include two-way communication (coaching and feedback); SAOs' ability to solve job related problems and participate in shaping their work; the impact of recognition; and the feeling of job importance. The items relating to intrinsic elements include feedback, coaching, expectations, job importance, job involvement, participation, problem solving, and recognition. The extrinsic categories include organizational climate. This combination of intrinsic and extrinsic items equates to an overall sense of the quality of relationship between SAOs and SALs.

Job design and ability to do the work. This factor speaks to the way jobs are planned supporting SAOs' ability to perform job duties. The components of this factor include expectations of performance; organization of the job; resources available; and SAOs' aptitude to perform job duties. Items relating to intrinsic elements include expectations, organization, resources, schedule, standards, and tools. The extrinsic element for this factor is aptitude. Overall the combinations of intrinsic and extrinsic items address how the design of the job impacts performance.

Job engagement and satisfaction. This factor speaks to SAOs' level of engagement with the work performed and level of satisfaction. The components of this

factor include design of the job, which allows for SAOs to take responsibility for the work performed, and the attitude displayed by SAOs related to how much they like their job. The items relating to extrinsic elements include job design, job importance, and responsibility. The items relating to intrinsic elements include attitude and liking the job. The combination of intrinsic and extrinsic elements addresses how involvement in the work impacts positive perceptions of the work environment.

Workgroup effectiveness. This factor speaks to the way SAOs view interactions occurring between members and within the workgroup. Components of this factor include effectiveness of workgroups and the workgroups' abilities to work closely to perform job duties. The intrinsic categories include cohesive and workgroup. This factor did not have extrinsic elements. Findings relate to the nature of SAOs basing their perceptions on what they observed in the work environment (Cohen & Jaffee, 1982). This also relates to findings from Renn and Hodges (2007), who argued perceptions are developed based on observations made by SAOs. Thus, stimuli of the work environment impact perceptions. As this factor includes elements cohesive and workgroup, one can see how the two specifically relate to perceptions of the intrinsic work environment.

Organizational climate and commitment. This factor speaks to how SAOs' view the collective environment where they work, ultimately resulting in a level of commitment to the work performed. Components of this factor include the involvement of the workgroup in the job; their familiarity with each other to a collective attitude displayed; and a display of commitment. The items relating to extrinsic elements include familiarity, group performance, and job involvement. The item relating to intrinsic

elements includes attitude. The combination of intrinsic and extrinsic elements outlines SAOs' views of the environment and impacts their level of commitment.

The five factors provide a combined framework where SALs can begin to identify perceptions of SAOs' work environment. The knowledge gained helps SALs better understand their leadership abilities and ease concerns SALs may have in terms of their leadership abilities. A study by Kingsley (2008) suggested SALs need training to improve their supervisory abilities. The factors identified by this study provide SALs with a way of identifying areas where problems may exist in the work environment, allowing them to make changes to their supervisory style. For example, the relationship factor examines relationships between SALs and SAOs. If results from this section indicate a problem, SALs can look at this area to determine causes and identify solutions. For example, low SAOWEPS scores in the area of relationship between SAL/SAO. Results could highlight the need for SALs to add or change coaching practices and allow SAOs more opportunities to participate in the job shaping process. Overall, this study can provide a context for SALs who are seeking to understand how SAOs view the work environment.

Hindsight Thoughts about the Development of SAOWEPS

In the development of the dissertation, the researcher has observed a number of improvements, which in hindsight, could have made the process easier and enriched the questionnaire. The improvements are outlined below.

Inclusion of a demographic category related to type of degree earned. Inclusion of a demographic question allowing respondents to add their degree/major discipline would have been helpful to identify how many respondents completed a SA

masters program. This information would have allowed the researcher to examine the connection between type of graduate preparation and perceptions of any of the five factors.

Choice of Likert scale. The researcher chose to use a Likert scale including options for strongly agree, agree, disagree, and strongly disagree. Three respondents wrote long e-mails to the researcher expressing frustration with the scale used in this study. The respondents' arguments related to a desire to rate some items as not applicable. One participant sent an e-mail stating the scale did not allow her to complete the questionnaire. After some thought, the researcher would not change the scale type, as this would impact the power of the factor analysis process. However, if the study examined differences between groups (with a valid and reliable questionnaire), the use of a scale which included a not applicable (N/A) option would be appropriate. An N/A option would allow SAOs to select the option if it was not specific to their job.

The two issues combined could have an impact on the success of a study, as they allow the researcher to further examine these data. The researcher encourages these two issues to be kept in mind as other researchers conduct similar studies.

Table 13. *Categories, Elements, Factors, Significant Items after Exploratory Factor Analysis*

Category	Element	Factor	Item post EFA
Relationship SAL/SAO	Coaching Participation Feedback Decision Making Job Involvement Recognition	Relationship between the SAL/SAO	Feedback Coaching Expectations Job Importance Job Involvement Organizational Climate Participation Problem Solving Recognition
Job Design and Ability to perform the work	Job Design Tool Work Schedule Resources Organized Training	Job Design and Ability to do the Work	Aptitude Expectations Organized Resources Schedule Standards Tools
Institutional Structure	Standards Responsibility Familiarity Group Performance Expectations Job Importance	Job Engagement and Satisfaction	Attitude Job Design Job Importance Likes Job Responsibility
Culture/Commitment	Adaptability Attitude Likes Job Organizational Climate	Workgroup Effectiveness	Cohesive Workgroup
Fit with Workgroup	Workgroup Cohesive Aptitude	Organizational Climate and Commitment	Attitude Familiarity Group Performance Job Involvement

Note: The placement of categories and factors in this table does not suggest exact relationship between the two. The category of training did not load at .55 or above and is not included in the SAOWEPS questionnaire.

Future Publication

The development of SAOWEPS yielded a large amount of data. SAOs from across the nation, $N = 702$, took time to respond to the questionnaire. The developed database can be analyzed to further understand SAOs' work environment. For example, these data can be analyzed factor-by-factor and item-by-item. The potential for future analysis and articles is great. Table 14 outlines seven potential journals and topics that can be developed from this study. The researcher plans to use the findings from the study for career advancement through the submission of articles to various journals.

Table 14. *List of Journals and Topics for Future Research*.

Journal	Research Question/Topic
College Student Affairs Journal	As a leader do you understand what SAOs are thinking?
College Student Affairs Journal	How do SAOs with less than 4 years experience in the field see the work environment?
New Directions in Student Affairs	Tips for SALs: Understanding the perceived supervisory relationship with SAOs.
Journal of Student Affairs Research and Practice	What contributes to SAOs' perceptions of the work environment?
Journal of Student Affairs Research and Practice	What does it take to help SALs to better understand the perceptions of SAOs
AHRD Journal	Bringing strategic human resources development to student affairs: Development of SAOWEPS.
National Association of Student Affairs Professionals (NASAP) Journal	Lessons learned: Validation of the Student Affairs Officers Work Environment Perception scale

Note: Articles will use data collected during the development of SAOWEPS.

Significance of the Study

Within the field of SA, the use of Human Resource Development (HRD) and Organizational Development (OD) approaches is often rejected. The resistance is because many SA personnel see these approaches as trends or fads, which are generic and not applicable to the field (Birnbaum, 2000). Given the resistance, Bauman (2005) argued higher education organizations are not effective as they reject HRD/OD approaches designed to promote performance improvement and effective practices. Thus, a gap within the field exists.

This gap presents an opportunity for this study to make an impact. The researcher's perspective has been influenced by HRD/OD practices since enrolling in a master's program in 2003. The aim of this study is to empower SALs with a questionnaire to identify SAOs' perceptions of the work environment. In the development of SAOWEPS, the researcher used a qualitative approach involving SALs in the development of the SAOWEPS. This approach ultimately yielded a HRD/OD influenced questionnaire, which is presented in nomenclature specific to the field. Given this, the questionnaire can be used to help SALs better understand the work environment of SAOs. Ultimately, this contributes to the usefulness of the questionnaire on the SA work environment.

Limitations

Although this study employed qualitative and quantitative approaches some limitations exist. The first limitation is related to the sample. The findings may have been different with a different sample. As the sample was composed entirely of NASPA members, one can only assume what the results would be if other SAOs were included.

A second limitation of the study is the overall usefulness of the questionnaire. For example, the researcher thinks the questionnaire makes a positive impact on the field, however, other SALs may feel differently. Given this, future studies with SALs are needed to ask the research question: how useful is the questionnaire and does it inform practice in the work environment? Data yielded from such a study will identify the usefulness of the questionnaire from a practitioner's perspective. Finally, some of the demographic items could be changed to provide for further analysis. For example, the questionnaire did not ask any questions about the type of degree (higher education administration, psychology, management, etc.) or type of job held previously. If the findings had been significant, such demographic questions could allow for additional conclusions to be drawn from data. The researcher encourages others to keep these limitations in mind when developing studies using the SAOWEPS.

Recommendations for the Application of SAOWEPS

One of the major outcomes of the study was to develop and validate a questionnaire, to allow SALs to identify SAOs' perceptions of the work environment. The 59-item questionnaire can be used with SAOs to better understand the work environment from their perspective. Potential uses include (a) new SALs administering the questionnaire prior to taking on leadership of a department or division; (b) SALs administering the questionnaire to gain a better understanding of the work environment at two or more points in time; and (c) performance consultants using the questionnaire within a department/division to identify issues or problems. The multiple uses are intended to empower the practitioner to better understand the work environment. Given

the multiple usage options, the researcher offers the following recommendations for the use of SAOWEPS.

Use of demographic data. The researcher recommends caution in the use of demographic data with SAOWEPS. Demographic data should never be used in departments where the number of individuals is insufficient to provide anonymity; improper use of demographic data would allow responses to be tracked back to individual respondents. The questionnaire is designed to provide respondents with a safe method to express their perceptions of the work environment. Therefore, the SAL must be diligent when using demographic information and ask if the demographic data are relevant to the situation.

Mode of delivery. The questionnaire can be delivered in a paper or electronic format. SAOWEPS can be taken and completed in less than eight minutes. Given this, respondents can take the questionnaire on paper or in an electronic format using a Palm Pilot or I-touch. The questionnaire can also be administered online using e-mail with a link to a website. The different delivery methods allow for the questionnaire to be used in an effective manner. To illustrate this point, paper and Palm Pilot/I-touch questionnaires can be administered during large group meetings. E-mail questionnaires can be administered over time without SAOs having to be present at a meeting or gathering.

Use of results. SAOWEPS is designed to be administered to measure perceptions of the work environment. SAOWEPS is not designed to determine the cause of problems within a department/division, as it identifies areas where problems can occur. Therefore, SAOWEPS should not be used to make final decisions about the allocation of resources, HR personnel issues, or widespread changes within a unit/department/division. SALs

using SAOWEPS have the responsibility of applying professional acumen to interpret scores and seek additional processes and resources to determine causes of problems. Failure to use SAOWEPS responsibly represents negligent use of the questionnaire.

SAOWEPS measures five factors in the work environment. Each factor (as measured by SAOWEPS) should be scored individually. The total score of SAOWEPS is not important as the questionnaire is designed to measure factors of the work environment. SAOWEPS should always use a Likert scale with a range of agreement. The researcher recommends using a scale including the following choices and criteria (or number) for scoring:

SA – Strongly agree = 4

A – Agree = 3

D – Disagree = 2

SD – Strongly disagree = 1

When scoring factors of SAOWEPS, responses to items in each factor should be totaled and divided by the number of items responded to compute an average for the factor. The average can then be interpreted by the SAOs as to perceptions of a specific factor.

Table 15 outlines how factor score averages could be interpreted. In addition, the table includes recommended actions for SALs to take based on interpretation of the scores. The actions include a range of proactive (maintenance) and reactive (action needed) steps. As a point of caution, when considering scores, it is important to note that perceptions vary from SAO to SAO. SALs should keep this in mind as they review scores.

Table 15. *Scoring for SAOWEPS Factors*

Score	Meaning	Action
Agreement		
3.66 – 4.00	Student Affairs Officers (SAO) view the work environment positively and perceptions are positive.	Student Affairs Leaders (SAL) should monitor this factor to ensure scores do not drop (proactive).
3.33 – 3.65	SAOs have positive perceptions of the work environment.	SALs should take time to examine the factor, identify causes of disagreement, and make changes as necessary (proactive).
3.00 – 3.32	SAOs' perceptions of the work environment are more positive than negative.	SALs should take this factor seriously and take steps to identify causes and make changes to positively impact work environment perceptions (proactive).
2.50 – 2.99	SAOs have mixed perceptions of the work environment, of which some are negative.	SALs must monitor this factor as noted above (proactive).
Disagreement		
2.00 – 2.49	Negative perceptions exist in the work environment.	SALs should explore problems and develop solutions as needed (reactive).
1.50 – 1.99	Perceptions of the work environment are negative.	SALs must take action to identify problems and develop solutions (reactive).
1.00 – 1.49	A majority of items are perceived negatively. Serious problems may exist.	Disagreement calls for immediate and thoughtful action (reactive).

As a note of caution, the researcher encourages, the user to look deeper at the score from each factor before making sweeping changes. This is very important as SAOWEPS is to be used as a tool to identify problems, not the causes of problems. The

creation and validation process yielded a questionnaire, which is specific to the field and not an institution. Thus, SAOWEPS is a flexible questionnaire, which allows SALs to customize the items chosen to be specific to their institution and administration. For example, if the SAL is not concerned with SAOs' perceptions of resources, he/she can remove all items specific to resources. The ability to customize SAOWEPS also helps SALs obtain more meaningful responses as this avoids the need to include an option for not applicable (N/A). In addition, customization of item choices allows SALs to receive higher response rates for items as they are specific to the situation. Finally, the SALs' ability to customize SAOWEPS allows it to be administered to workgroups, departments, and/or at the division level.

Ethical use of the instrument. SALs using SAOWEPS have the responsibility to use the questionnaire in an ethical manner. SALs should never use SAOWEPS in ways that threaten SAOs' ability to anonymously respond to items or coerce respondents to participate or rate items in a specific way. At all times, respondents must be allowed to participate and rate items as they choose.

The recommendations, as outlined, allow SALs to use the questionnaire as designed to gain meaningful results. The researcher suggests the following two approaches be used when administering SAOWEPS.

Use of a different Likert scale. SALs can use a flexible Likert scale. For the purposes of conducting EFA, the researcher used a four-point forced choice Likert scale. This was done to force respondents to respond to items. The validated questionnaire allows a Likert scale including a range of agreement (strongly agree to strongly disagree)

and an option of does not apply to me or does not apply to my situation (N/A). Such a scale provides the respondent with a range of choices.

Randomization of items. Since the factor structure includes 24 items, it is necessary to randomize items to produce better results. Items can be randomized allowing respondents to spend more time taking the questionnaire versus thinking about the relationship of similarly worded items.

Recommendations for the Field

The researcher suggests a number of recommendations for the field. The following recommendations are supported by the review of literature and findings from the study.

SALs must pay more attention to SAOs' perceptions of the work environment. SALs cannot disregard the impact of perceptions, as they are seen as reality to SAOs (Boshear, 1977). This becomes important as various studies noted frustration with perceptions of supervision and work environment contribute to SAOs' decisions to leave their jobs (Guanci, 2008; Hart, 2005; Shriver & Re, 2006; Turner & Rimanoczy, 2008).

Use SAOWEPS to improve SALs' knowledge of the work environment. Given the gap between SAOs' supervisory expectations of SALs (Shupp, 2007) and SALs' challenges with understanding the perceptions of SAOs (Harned & Murphy, 1998), the researcher recommends the use of SAOWEPS to bridge this gap.

SALs must understand the diverse nature of the work environment. The findings of this study identified five distinct factors related to the SA work environment (Relationship, Job Design, Engagement, Effectiveness, and Commitment). To be

effective, SALs must understand how each of these factors impacts SAOs' views of the work environment and be willing to explore each.

Future Research

Given the findings of the study, a number of areas for future research exist. The research allows SA professionals to better understand issues in the work environment. Potential research studies are outlined below.

Gender work environment perceptions study. A study of the differences between work environment perceptions with male and female SAOs would be useful. This would highlight gender perceptions and how they may be impacted by the five factors identified in this study.

Minority group study. A study with various minority groups can be conducted to measure work environment perceptions. Many authors have examined the issue of perceptions of leadership, organizational environment, and other aspects of the work environment for minority SAOs. However, no studies have examined this issue from the perspective of the five factors identified in this study. A potential research question could be: What are the differences in perceptions for minority SAOs? Such a study could shed light into how minority SAOs view the work environment.

Usefulness of SAOWEPS. An additional area for research includes a qualitative study to measure SALs' perceptions of the usefulness of SAOWEPS before and after use. This provides more insight into the researcher's perceived value of the tool. As stated, the researcher feels the factors identified by this study are important, however other SALs may not see their relevance. The research question may be: What is the perceived

value/utility of SAOWEPS? Therefore, a study examining their perceptions of the tool would make a positive contribution to the field.

Revalidation of SAOWEPS. In four to five years, the literature should be reviewed and the SAOWEPS questionnaire updated and revalidated. This ensures the questionnaire is measuring relevant elements of the SA work environment. The title could be: 'Is SAOWEPSs still reliable? A five-year study of the questionnaire'. Such a study will be important as it ensures the questionnaire still measures the factors identified through EFA.

Overall, these potential studies can lend to a number of research opportunities to benefit the field of SA. The researcher hopes this study will provide others with valuable information to better the field. The combination of this study and potential studies related to the findings will result in an abundance of studies examining various aspects of the SA and bring about a better understanding of the work environment.

Conclusion

The goal of this mixed methods study developed and validated a questionnaire designed to measure perceptions of the work environment. Findings from the study did not identify a difference in the way SAOs' view the work environment in all five factors. Ultimately, application of the study provides SALs with a valid and reliable questionnaire, which can be used to better the work environment.

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APPENDIX A: HUMAN SUBJECTS APPROVAL

Colorado State University
Knowledge to Go Places

Research Integrity & Compliance Review Office, Office of the Vice President for Research 321 General Services Building -Campus Delivery 2011
Fort Collins, CO TEL: (970) 491-1553 FAX: (970) 491-2293

NOTICE OF APPROVAL FOR HUMAN RESEARCH

DATE: January 25,2010 **TO:** Gilley, Jerry, Education DeVoe, Dale, Education, Haynes, Derrick, Education, Makela, Carole, 1588 School of Education **FROM:** Barker, Janell, CSU IRB 1 Measuring the Student Affairs Work Environment: Development of the Student Affairs Officer Work Environment

PROTOCOL TITLE:	Perception Scale.	
FUNDING SOURCE:	NONE	
PROTOCOL NUMBER:	09-1279H	
APPROVAL PERIOD:	Approval Date: January 22,2010	Expiration Date: January 21,2011

The CSU Institutional Review Board (IRB) for the protection of human subjects has reviewed the protocol entitled: Measuring the Student Affairs Work Environment: Development of the Student Affairs Officer Work Environment Perception Scale. . The project has been approved for the procedures and subjects described in the protocol. This protocol must be reviewed for renewal on a yearly basis for as long as the research remains active. Should the protocol not be renewed before expiration, all activities must cease until the protocol has been re-reviewed.

If approval did not accompany a proposal when it was submitted to a sponsor, it is the PI's responsibility to provide the sponsor with the approval notice.

This approval is issued under Colorado State University's Federal Wide Assurance 00000647 with the Office for Human Research Protections (OHRP). If you have any questions regarding your obligations under CSU's Assurance, please do not hesitate to contact us.

Please direct any questions about the IRB's actions on this project to:
Janell Barker, Senior IRB Coordinator -(970) 491-1655 Janell.Barker@Research.Colostate.edu Evelyn Swiss, IRB Coordinator -(970) 491-1381 Evelyn.Swiss@Research.Colostate.edu

Barker, Janell

Includes:

Approval is for a maximum of 3,000 participants using the approved electronic cover letter that is uploaded in eProtocol.

Approval Period:	January 22,2010 through January 21,2011
Review Type:	EXPEDITED
IRB Number:	00000202

Colorado State University
Knowledge to Go Places

Research Integrity & Compliance Review Office, Office of the Vice President for Research 321 General Services Building -Campus Delivery 2011 Fort Collins, CO TEL: (970) 491-1553 FAX: (970) 491-2293

NOTICE OF APPROVAL FOR HUMAN RESEARCH

DATE: March 08, 2010 **TO:** Gilley, Jerry, Education DeVoe, Dale, Education, Haynes, Derrick, Education, Makela, Carole, 1588 School of Education **FROM:** Barker, Janell, CSU IRB 1 Measuring the Student Affairs Work Environment: Development of the

PROTOCOL TITLE:	Perception Scale.	
FUNDING SOURCE:	NONE	
PROTOCOL NUMBER:	09-1279H	
APPROVAL PERIOD:	Approval Date: March 08, 2010	Expiration Date: January 21, 2011

Student Affairs Officer Work Environment

The CSU Institutional Review Board (IRB) for the protection of human subjects has reviewed the protocol entitled: Measuring the Student Affairs Work Environment: Development of the Student Affairs Officer Work Environment Perception Scale. . The project has been approved for the procedures and subjects described in the protocol. This protocol must be reviewed for renewal on a yearly basis for as long as the research remains active. Should the protocol not be renewed before expiration, all activities must cease until the protocol has been re-reviewed.

If approval did not accompany a proposal when it was submitted to a sponsor, it is the PI's responsibility to provide the sponsor with the approval notice.
This approval is issued under Colorado State University's Federal Wide Assurance 00000647 with the Office for Human Research Protections (OHRP). If you have any questions regarding your obligations under CSU's Assurance, please do not hesitate to contact us.

Please direct any questions about the IRB's actions on this project to:
Janell Barker, Senior IRB Coordinator -(970) 491-1655 Janell.Barker@Research.Colostate.edu Evelyn Swiss, IRB Coordinator -(970) 491-1381 Evelyn.Swiss@Research.Colostate.edu

Janell Barker

Includes: The amendment is to use the revised consent for new participants; the updated email consents; and to use the revised questionnaire.

Approval Period:	March 08, 2010 through January 21, 2011
Review Type:	EXPEDITED
IRB Number:	00000202

APPENDIX B: LETTERS TO PARTICIPANTS

Invitation Letter

School of Education
1588 Campus Delivery
Fort Collins, Colorado 80523-1588

Dear Student Affairs Officer,

I am writing to ask for your assistance with my dissertation research. You have been selected based on your work in the field of Student Affairs. My research aims to better understand how you perceive your work environment. Your experience, insight and perceptions are very important to me. In the next week or so, you will receive an e-mail from me with a request to participate in the study and a link to take the questionnaire. The subject line of my e-mail will be: "Student Affairs Perception Questionnaire." The questionnaire should take no more than 15 – 20 minutes to complete.

Your participation in this study is voluntary. Your responses will be kept anonymous and cannot be connected with your name or e-mail address. So I encourage you to be honest.

You will not receive compensation for the questionnaire. However, if you choose to participate, you will be offered an opportunity to enter a drawing for to win one of five $20 Visa Gift Cards after the questionnaire is completed. The drawing will take place on February 28, 2010.

I would like to thank you in advance for your assistance with my study. If you have any questions, feel free to e-mail me at Derrick.Haynes@colostate.edu.

Best regards,

Derrick E. Haynes
Doctoral Candidate, Organizational Performance and Change
Colorado State University

Dr. Jerry Gilley
Advisor, Organizational Performance and Change
Colorado State University

Invitation Letter with Link

School of Education
1588 Campus Delivery
Fort Collins, Colorado 80523-1588

Dear Student Affairs Officer,

I am inviting you to do me favor and participate in a study designed to assess Student Affairs Officers Perceptions of the Work Environment. You were selected based on your employment in the field of Student Affairs.

My name is Derrick E. Haynes, and I am a doctoral candidate at Colorado State University in Fort Collins Colorado. My goal is to identify your perceptions of the work environment. The questionnaire that is hyper linked below, will ask you to respond to a series of statements related to the work you do. There are no direct benefits from participating in this study. However, your responses will be used to refine a questionnaire that will be used to improve the work environment of Student Affairs. I have scrutinized the development of this study to eliminate any known risks. Your answers will be strictly confidential. Your answers can never be associated with your name or e-mail address. So, I welcome you to be honest about your perceptions. The questionnaire will take 15 – 20 minutes to complete.

You will not receive compensation for the questionnaire. However, if you choose to participate, you will be offered an opportunity to enter a drawing for to win one of five $20 Visa Gift Cards after the questionnaire is completed. The drawing will take place on February 28, 2010.

If you have any questions about the questionnaire, feel free to e-mail me at derrick.haynes@colostate.edu. If you have any questions about your rights as a participant, please contact Janell Barker, Institutional Review Board (IRB) Administrator, 970-491-1655. This consent was approved by the CSU IRB on January 22, 2010.

I would like to thank you in advance for your assistance with my research. Click the following link to access the questionnaire: www.insertthelinklater.com.

Best regards,

Derrick E. Haynes
Doctoral Candidate, Organizational Performance and Change
Colorado State University

Dr. Jerry Gilley
Advisor, Organizational Performance and Change
Colorado State University

APPENDIX C: SAOWEPS QUESTIONNAIRES

Student Affairs Work Environment Questionnaire (test instrument)

Thank you for participating in this questionnaire about the work environment for Student Affairs Officers. You have been selected to participate because you work in the field. The questionnaire should not take longer than 15-20 minutes to complete. Your identity is protected and will remain anonymous.

This questionnaire examines issues that have been identified as having an impact on your perceptions of the work environment at your university. You must respond to each statement before you can move to following screen.

Many thanks for your time and input. Should you have any questions regarding this questionnaire, please contact Derrick E. Haynes at Derrick.Haynes@colostate.edu.

Instructions Use the following scale (Strongly Agree, Agree, Disagree, Strongly Disagree) to best describe the extent to which you agree or disagree with each of the following statements in reference to the university where you work. There are no right or wrong answers, use the first response that comes to mind when responding to each statement.

1. Job related problem solving is encouraged by my supervisor.
2. Resources (used to perform job duties) are geared toward meeting the mission of my university.
3. When my job duties change, new tools are available for me to do my job.
4. When participating in feedback with my supervisor, I can communicate my thoughts and feelings without the fear of penalty.
5. My work standards are measurable.
6. If asked, I could describe how my job responsibilities support the mission of the university.
7. My supervisor encourages my participation in training activities.
8. I am willing to work through ambiguity on the job.
9. The feedback I receive from my supervisor is constructive.
10. My supervisor's attitude of the work environment impacts my perception of the work environment.
11. There are sufficient job related tools available for me to do my job.
12. The coaching provided by my supervisor helps me make changes in my performance.
13. I can perform all of my assigned job duties.
14. The work I do is arranged in a way that allows me to exceed minimum performance expectations.
15. I have things in common with my coworkers.
16. My job duties are organized around similar work functions (job duties are logically arranged).
17. Members of my workgroup support each other in order to complete job duties.
18. I am empowered to create solutions to problems in the work I do.
19. My supervisor provides me with feedback on my work performance.

20. My work performance is influenced by the performance of others in my workgroup.
21. I feel comfortable participating in conversations with my supervisor about job duties.
22. My workgroup works to support the mission of the university.
23. Work standards are clearly articulated.
24. The attitudes of others impact my outlook of the environment where I work.
25. The relationship with my supervisor affects the initiative I take in my job.
26. Members of my workgroup discuss non-work related issues with each other.
27. I am willing to adapt to changes in my work environment.
28. Resources are available (when needed) to do my job.
29. Recognizing job related accomplishments is valued in my work environment.
30. Professional development/training activities are linked to the mission of the university.
31. Work schedules are arranged in a way that meets the needs of the department.
32. In my department, jobs are arranged in a way that allows for job duties to be completed.
33. The relationship with my supervisor assists me in being more involved in the job I do.
34. My input is heard when I participate in conversations about my work performance.
35. Members of the workgroup are willing to learn new skills in order to perform job duties.
36. I take responsibility for the work I do, based on the mission of the university.
37. The structure of my department allows jobs to be arranged in a way that supports the completion of my job duties.
38. Meeting expected performance standards is important in my workgroup.
39. The tools related to my job allow me to perform job duties.
40. The work I do is arranged in a way that allows me to perform my expected job duties.
41. Events in the work environment impact my attitude about the work I do.
42. I understand what my supervisor expects of me.
43. I have access to the tools necessary to perform my job duties.
44. Work schedules are arranged in a way that meets of the needs of the university.
45. The university encourages members of the workgroup to get to know each other better.
46. My work schedule lends to my ability to meet job expectations.
47. I have developed a working relationship with my supervisor through coaching sessions.
48. The work standards (as assigned by my supervisor) are realistic.
49. Coaching provides me with different insights into the work I perform.
50. My workgroup operates with a set of shared values.
51. Members of the workgroup seek clarification from each other when needed.
52. The feedback I receive from my supervisor helps me develop my skills.
53. Training is provided for me to do my job.

54. Everyone in my workgroup knows how to perform their job duties.
55. Professional development/training activities are based on standards/practices in the field of student affairs.
56. If asked, I would completely change the job duties I perform.
57. My contributions to the work I do are valued.
58. My supervisor encourages me to participate in activities that will help me to continue growing.
59. I willingly accept changes made to my job duties.
60. Work standards allow me to carry out my assigned job duties.
61. My supervisor communicates how job duties support the mission of the university.
62. I often participate in discussions about my job duties with my supervisor.
63. The university treats all members of the workgroup fairly.
64. Recognition is an approach used in my department/student affairs division.
65. My supervisor is open to receiving feedback from me.
66. My job responsibilities directly support the mission of the university.
67. I am included in opportunities to solve problems in my workgroup.
68. All members of my workgroup "pull their weight" with assigned job duties.
69. Expectations are clearly articulated at the university.
70. Members of my workgroup feel comfortable seeking clarification from a supervisor when needed.
71. My job duties are clearly defined.
72. My supervisor uses coaching to create an environment that provides opportunities for growth.
73. Recognition encourages me to work harder to complete job duties.
74. My job involvement is directly related to the communicated expectations of my supervisor.
75. Job related resources at the university are abundant.
76. I know when I am performing job duties to the standards set by my supervisor.
77. The job I perform is meaningful to the university.
78. Professional development/training is given to ensure my workgroup performs job duties consistently.
79. The resources in my department allow me to perform job duties.
80. My attitude is impacted by the actions of others in my work environment.
81. Job related resources are managed appropriately.
82. I have positive working relationships with my coworkers.
83. My supervisor's outlook impacts my attitude about the work I do.
84. My supervisor provides opportunities for members of the workgroup to become familiar with each other.
85. I am here because I am making a contribution to the university.
86. I tell others about the positive aspects of my job.
87. Based on my experience here, I plan to continue my career at this university.
88. My supervisor encourages me to discuss various aspects of my job with him/her.

89. The importance of my job encourages me to take responsibility for the work I do.
90. I have a positive attitude toward the work I do.
91. My supervisor communicates how job duties are important to the mission of the university.
92. I am committed to the work I do.
93. Work expectations provide me with a structure so I can perform job duties.
94. I feel comfortable solving job related problems, due to the relationship with my supervisor.
95. My supervisor recognizes the accomplishments of his/her employees.
96. My supervisor discusses his/her expectations for my work performance with me.
97. The job duties that I perform are listed in my job description.
98. I am here because of the mission of the university.
99. My supervisor creates an environment where I am able to perform my job.
100. My job duties are important to the mission of the university.
101. My workgroup performs as a team.
102. My work schedule is organized around the need for the job I perform.
103. My supervisor encourages me to participate in solving problems related to the job I do.
104. Available tools assist me with exceeding the minimum expectations for job performance.
105. Student Affairs Officers tend to become burned-out due to the work they do here at the university.
106. Feedback from my supervisor causes me to work beyond the minimum expectations of my job.
107. My supervisor recognizes the work of his/her employees.
108. The expectations of my work performance are realistic.
109. I am willing to change my job duties to meet the changing mission of the university.
110. I feel more connected to my department/division when I am allowed to participate in conversations about my job with my supervisor.
111. Coaching sessions with my supervisor are helpful.
112. Work standards at my university support my ability to perform job duties.
113. My workgroup works together as a cohesive unit.
114. My ability to perform job duties is affected by the relationships with others in my workgroup.
115. Collaboration within the workgroup happens without prompting by a supervisor.
116. I am familiar with the people in my workgroup.
117. The university's policies support my workgroup's ability to perform job duties.
118. Professional development/training is relevant to my job duties.
119. My supervisor encourages me to take responsibility over the job I do.
120. I like the work I do.
121. The work I do is important to me.

122. My contributions are valued in the work environment.
123. My work schedule allows me to complete all of my assigned duties.
124. My ability to perform job duties is affected by the relationships with my workgroup.
125. My coworkers value teamwork

Demographic Information about you

126. Are you

Male o Female o

127. What is your age range?

o Younger than 30 o 31-40 o 41-50 o 51 – 60 o 61 – 70 o 70+

128. Please select one or more of the following ethnicities that best describes you (check all that apply):
- o American Indian or Alaska Native
- o Asian
- o Black or African American
- o Native Hawaiian or Other Pacific Islander
- o White African

129. How long have you worked for your current supervisor?
- o Less than 1 year
- o 1-2 years
- o 2-3 years
- o 3-4 years
- o 4-5 years
- o 5-10 years
- o 11-15 years
- o 16 or more years

130. How many years have you worked in the field of student affairs?
- o Less than 1 year
- o 1-2 years
- o 2-3 years
- o 3-4 years
- o 4-5 years
- o 5-10 years
- o 11-15 years
- o 16 or more years

131. Do you have a job assignment where you perform two different jobs (ex. Admissions recruiting and student retention advising).
- o No
- o Yes. Briefly describe the two jobs you perform in the text box below.

132. What is your highest educational attainment level?
- o Bachelors
- o Masters
- o Doctorate
- o Professional degree (example – law or medical doctor degree)

133. Which of the following titles best fits the job you perform (please select one)?
- o Counselor
- o Advisor
- o Coordinator
- o Specialist
- o Assistant Director
- o Associate Director
- o Director
- o Executive Director
- o Dean
- o Assistant Vice President/Chancellor
- o Associate Vice President/Chancellor
- o Vice President/Chancellor

[other type text here]

134. How many years have you worked in your current position?
- o Less than 1 year
- o 1-2 years
- o 3-4 years
- o 5- 6 years
- o 7-10 years
- o 11-15 years
- o 16 or more years

135. How many people do you supervise (exclude undergraduate or graduate students)?
[OPEN TEXT BOX]

136. Do you work in the United States?
- o Yes
- o No

Demographic Information about your institution

137. My university is referred to as a
- o State funded Institution
- o Privately Funded Institution
- o For-Profit Institution

138. What is the size of the universities undergraduate student population?
- o 100 – 500
- o 501 – 1000
- o 1001 – 3000
- o 3001 – 5000
- o 5001 – 10,000
- o 10,001 – 15,000
- o 15,001 – 20,000
- o 20,001 – 30,000
- o 30,001 – 40,000
- o 40,001+

Table 16. *New SAOWEPS with Element, Number, and Item*

Element	Number	Item
Tools	Q3	When my job duties change, new tools are available for me to do my job.
Feedback	Q4	When participating in feedback with my supervisor, I can communicate my thoughts and feelings without the fear of penalty.
Feedback	Q9	The feedback I receive from my supervisor is constructive.
Tools	Q11	There are sufficient job related tools available for me to my job.
Coaching	Q12	The coaching provided by my supervisor helps me make changes in my performance.
Coworkers (CoWorkers)	Q17	Members of my workgroup support each other in order to complete job duties.
Feedback	Q19	My supervisor provides me with feedback on my work performance.
Participation	Q21	I feel comfortable participating in conversations with my supervisor about job duties.
Attitude	Q24	The attitudes of others impact my outlook of the environment where I work.
Job Involvement (JobInv)	Q25	The relationship with my supervisor affects the initiative I take in my job.
Resources	Q28	Resources are available (when needed) to do my job.
Organized	Q32	In my department, jobs are arranged in a way that allows for job duties to be completed.
JobInv	Q33	The relationship with my supervisor assists me in being more involved in the job I do.
Participation	Q34	My input is heard when I participate in conversations about my work performance.
Tools	Q39	The tools related to my job allow me to perform job duties.
Organized	Q40	The work I do is arranged in a way that allows me to perform my expected job duties.
Attitude	Q41	Events in the work environment impact my attitude about the work I do.
Expectations	Q42	I understand what my supervisor expects of me.
Tools	Q43	I have access to the tools necessary to perform my job duties.
Schedule	Q46	My work schedule lends to my ability to meet job expectations.
Coaching	Q47	I have developed a working relationship with my supervisor through coaching sessions.
Feedback	Q52	The feedback I receive from my supervisor helps me develop my skills.
OrgClimate	Q58	My supervisor encourages me to participate in activities that will help me to continue growing.

Participation	Q62	I often participate in discussions about my job duties with my supervisor.
Feedback	Q65	My supervisor is open to receiving feedback from me.
Responsibility	Q66	My job responsibilities directly support the mission of the university.
Expectations	Q69	Expectations are clearly articulated at the university.
Coaching	Q72	My supervisor uses coaching to create an environment that provides opportunities for growth.
Resources	Q75	Job related resources at the university are abundant.
Job Design (JobDsgn)	Q77	The job I perform is meaningful to the university.
Aptitude	Q78	Professional development/training is given to ensure my workgroup performs job duties consistently.
Resources	Q79	The resources in my department allow me to perform job duties.
Attitude	Q80	My attitude is impacted by the actions of others in my work environment.
Resources	Q81	Job related resources are managed appropriately.
CoWorkers	Q82	I have positive working relationships with my coworkers.
Attitude	Q83	My supervisor's outlook impacts my attitude about the work I do.
Familiarity	Q85	I am here because I am making a contribution to the university.
Like Job (LikesJob)	Q86	I tell others about the positive aspects of my job.
Participation	Q88	My supervisor encourages me to discuss various aspects of my job with him/her.
Job Importance (JobImp)	Q89	The importance of my job encourages me to take responsibility for the work I do.
Attitude	Q90	I have a positive attitude toward the work I do.
JobImp	Q91	My supervisor communicates how job duties are important to the mission of the university.
LikesJob	Q92	I am committed to the work I do.
Problem Solving (ProblemSlvg)	Q94	I feel comfortable solving job related problems, due to the relationship with my supervisor.
Expectations	Q96	My supervisor discusses his/her expectations for my work performance with me.
JobImp	Q100	My job duties are important to the mission of the university.
ProblemSlvg	Q103	My supervisor encourages me to participate in solving problems related to the job I do.
Tools	Q104	Available tools assist me with exceeding the minimum expectations for job performance.
Recognition	Q107	My supervisor recognizes the work of his/her employees.

Exceptions	Q108	The expectations of my work performance are realistic.
Coaching	Q111	Coaching sessions with my supervisor are helpful.
Standards	Q112	Work standards at my university support my ability to perform job duties.
Cohesive	Q113	My workgroup works together as a cohesive unit.
Group Performance (GroupPerf)	Q114	My ability to perform job duties is affected by the relationships with others in my workgroup.
Cohesive	Q115	Collaboration within the workgroup happens without prompting by a supervisor.
LikesJob	Q120	I like the work I do.
JobImp	Q121	The work I do is important to me.
Familiarity	Q124	My ability to perform job duties is affected by the relationships with my workgroup.
Cohesive	Q125	My coworkers value teamwork.

Note: This table can be used as a key for the validated $N = 59$ SAOWEPS questionnaire.

Table 17. *Validated SAOWEPS (59 items)*

Item
1. When my job duties change, new tools are available for me to do my job.
2. When participating in feedback with my supervisor, I can communicate my thoughts and feelings without the fear of penalty.
3. The feedback I receive from my supervisor is constructive.
4. There are sufficient job related tools available for me to my job.
5. The coaching provided by my supervisor helps me make changes in my performance.
6. Members of my workgroup support each other in order to complete job duties.
7. My supervisor provides me with feedback on my work performance.
8. I feel comfortable participating in conversations with my supervisor about job duties.
9. The attitudes of others impact my outlook of the environment where I work.
10. The relationship with my supervisor affects the initiative I take in my job.
11. Resources are available (when needed) to do my job.
12. In my department, jobs are arranged in a way that allows for job duties to be completed.
13. The relationship with my supervisor assists me in being more involved in the job I do.
14. My input is heard when I participate in conversations about my work performance.
15. The tools related to my job allow me to perform job duties.
16. The work I do is arranged in a way that allows me to perform my expected job duties.
17. Events in the work environment impact my attitude about the work I do.
18. I understand what my supervisor expects of me.
19. I have access to the tools necessary to perform my job duties.
20. My work schedule lends to my ability to meet job expectations.
21. I have developed a working relationship with my supervisor through coaching sessions.
22. The feedback I receive from my supervisor helps me develop my skills.
23. My supervisor encourages me to participate in activities that will help me to continue growing.
24. I often participate in discussions about my job duties with my supervisor.
25. My supervisor is open to receiving feedback from me.
26. My job responsibilities directly support the mission of the university.
27. Expectations are clearly articulated at the university.
28. My supervisor uses coaching to create an environment that provides opportunities for growth.
29. Job related resources at the university are abundant.
30. The job I perform is meaningful to the university.
31. Professional development/training is given to ensure my workgroup performs job duties consistently.
32. The resources in my department allow me to perform job duties.
33. My attitude is impacted by the actions of others in my work environment.
34. Job related resources are managed appropriately.

35. I have positive working relationships with my coworkers.
36. My supervisor's outlook impacts my attitude about the work I do.
37. I am here because I am making a contribution to the university.
38. I tell others about the positive aspects of my job.
39. My supervisor encourages me to discuss various aspects of my job with him/her.
40. The importance of my job encourages me to take responsibility for the work I do.
41. I have a positive attitude toward the work I do.
42. My supervisor communicates how job duties are important to the mission of the university.
43. I am committed to the work I do.
44. I feel comfortable solving job related problems, due to the relationship with my supervisor.
45. My supervisor discusses his/her expectations for my work performance with me.
46. My job duties are important to the mission of the university.
47. My supervisor encourages me to participate in solving problems related to the job I do.
48. Available tools assist me with exceeding the minimum expectations for job performance.
49. My supervisor recognizes the work of his/her employees.
50. The expectations of my work performance are realistic.
51. Coaching sessions with my supervisor are helpful.
52. Work standards at my university support my ability to perform job duties.
53. My workgroup works together as a cohesive unit.
54. My ability to perform job duties is affected by the relationships with others in my workgroup.
55. Collaboration within the workgroup happens without prompting by a supervisor.
56. I like the work I do.
57. The work I do is important to me.
58. My ability to perform job duties is affected by the relationships with my workgroup.
59. My coworkers value teamwork.

APPENDIX D: STATISTICAL TABLES

Table 18. *Rotated Factor Matrix*

Element	Item	Factor 1	2	3	4	5
Feedback	Q9	.747				
Coaching	Q12	.745				
Feedback	Q52	.741				
Expectations	Q96	.732				
Participation	Q88	.722				
Coaching	Q72	.720				
JobInv	Q33	.703				
Recognition	Q107	.699				
Feedback	Q19	.698				
Feedback	Q4	.698				
Recognition	Q95	.689				
Participation	Q21	.688				
Coaching	Q111	.681				
Feedback	Q65	.680				
ProblemSlvg	Q94	.661				
Coaching	Q47	.658				
Participation	Q34	.644				
Expectations	Q42	.642				
OrgClimate	Q58	.627				
Participation	Q62	.621				
ProblemSlvg	Q103	.579				
JobImp	Q91	.560				
Tools	Q43		.716			
Resources	Q79		.694			
Resources	Q28		.659			
Tools	Q104		.634			
Resources	Q81		.621			
Tools	Q11		.607			
Tools	Q39		.604			
Resources	Q75		.602			
Organized	Q40		.601			
Expectations	Q108		.589			
Aptitude	Q78		.582			
Tools	Q3		.579			
Schedule	Q46		.575			
Standards	Q112		.574			

Expectations	Q69	.562				
Organized	Q32	.557				
LikesJob	Q92		.706			
JobImp	Q121		.663			
JobImp	Q89		.636			
Attitude	Q90		.629			
LikesJob	Q85		.610			
JobDsgn	Q77		.595			
JobImp	Q100		.595			
LikesJob	Q86		.585			
LikesJob	Q120		.583			
Responsibility	Q66		.561			
Cohesive	Q113			.714		
Cohesive	Q125			.711		
CohesiveQ101	Q101			.700		
CoWorkers	Q17			.679		
Cohesive	Q115			.613		
CoWorkers	Q82			.587		
Attitude	Q80					.720
Attitude	Q83					.651
GroupPerf	Q114					.634
Familiarity	Q124					.621
Attitude	Q24					.616
Attitude	Q41					.590
JobInv	Q25					.552

Note: Extraction Method: Alpha Factoring. Rotation Method: Varimax with Kaiser Normalization. Rotation converged in 7 iterations. Items below .55 were removed.

Table 19. *Response Items: Scale, Frequencies, Percentages, and Means*

Element	#	Strongly Agree		Agree		Disagree		Strongly Disagree		***M***
		F	%	F	%	F	%	F	%	
ProblemSlvg	Q1	399	56.7	271	38.5	30	4.3	2	0.3	1.48
Resources	Q2	166	23.6	472	67	60	8.5	4	0.6	1.86
Tools	Q3	69	9.8	387	55.0	224	31.8	22	3.1	2.28
Feedback	Q4	324	46.0	242	34.4	109	15.5	27	3.8	1.77
Standards	Q5	119	16.9	443	62.9	132	18.8	8	1.1	2.04
Responsibility	Q6	311	44.2	348	49.4	38	5.4	5	0.7	1.63
Training	Q7	356	50.6	295	41.9	45	6.4	6	0.9	1.57
Adapting	Q8	335	47.6	344	48.9	23	3.3	0	0.0	1.56
Feedback	Q9	208	29.5	357	50.7	123	17.5	14	2.0	1.92
OrgClimate	Q10	292	41.5	346	49.1	59	8.4	5	0.7	1.68
Tools	Q11	115	16.3	464	65.9	116	16.5	7	1.0	2.02
Coaching	Q12	139	19.7	332	47.2	194	27.6	37	5.3	2.18
JobDsgn	Q13	358	50.9	297	42.2	42	6.0	5	0.7	1.56
Organized	Q14	228	32.4	358	50.9	109	15.5	7	1.0	1.85
CoWorkers	Q15	195	27.7	440	62.5	60	8.5	7	1.0	1.83
Organized	Q16	140	19.9	423	60.1	127	18.0	12	1.7	2.02
CoWorkers	Q17	205	29.1	397	56.4	86	12.2	14	2.0	1.87
ProblemSlvg	Q18	311	44.2	326	46.3	61	8.7	4	0.6	1.66
Feedback	Q19	189	26.8	363	51.6	127	18.0	23	3.3	1.98
CoWorkers	Q20	104	14.8	376	53.4	194	27.6	28	4.0	2.21
Participation	Q21	302	42.9	306	43.5	84	11.9	10	1.4	1.72
Cohesive	Q22	271	38.5	393	55.8	37	5.3	1	0.1	1.67
Standards	Q23	105	14.9	372	52.8	204	29.0	21	3.0	2.20
Attitude	Q24	184	26.1	418	59.4	92	13.1	8	1.1	1.89
JobInv	Q25	231	32.8	337	47.9	121	17.2	13	1.8	1.88
Familiarity	Q26	224	31.8	436	61.9	37	5.3	5	0.7	1.75
Adapting	Q27	322	45.7	379	53.8	1	0.1	0	0.0	1.54
Resources	Q28	117	16.6	478	67.9	101	14.3	6	0.9	1.99
Recognition	Q29	128	18.2	385	54.7	162	23.0	27	3.8	2.13
Training	Q30	139	19.7	408	58.0	137	19.5	18	2.6	2.05
Schedule	Q31	162	23.0	419	59.5	104	14.8	17	2.4	1.97
Organized	Q32	112	15.9	475	67.5	109	15.5	6	0.9	2.01
JobInv	Q33	208	29.5	317	45.0	155	22.0	22	3.1	1.99
Participation	Q34	208	29.5	396	56.2	83	11.8	15	2.1	1.86
Aptitude	Q35	120	17.0	465	66.1	107	15.2	10	1.4	2.01
Responsibility	Q36	284	40.3	387	55.0	30	4.3	1	0.1	1.64
Organized	Q37	117	16.6	435	61.8	130	18.5	20	2.8	2.08
GroupPerf	Q38	208	29.5	411	58.4	77	10.9	6	0.9	1.83
Tools	Q39	107	15.2	543	77.1	51	7.2	1	0.1	1.92

Organized	Q40	120	17.0	492	69.9	87	12.4	3	0.4	1.96
Attitude	Q41	235	33.4	427	60.7	38	5.4	2	0.3	1.73
Expectations	Q42	215	30.5	388	55.1	92	13.1	7	1.0	1.84
Tools	Q43	103	14.6	496	70.5	96	13.6	7	1.0	2.01
Schedule	Q44	132	18.8	471	66.9	92	13.1	7	1.0	1.96
Familiarity	Q45	97	13.8	382	54.3	205	29.1	18	2.6	2.21
Schedule	Q46	128	18.2	465	66.1	105	14.9	4	0.6	1.98
Coaching	Q47	106	15.1	252	35.8	279	39.6	65	9.2	2.43
Standards	Q48	149	21.2	443	62.9	98	13.9	12	1.7	1.96
Coaching	Q49	104	14.8	381	54.1	187	26.6	30	4.3	2.20
GroupPerf	Q50	131	18.6	402	57.1	150	21.3	19	2.7	2.08
Aptitude	Q51	166	23.6	439	62.4	93	13.2	4	0.6	1.91
Feedback	Q52	173	24.6	349	49.6	154	21.9	26	3.7	2.05
Training	Q53	103	14.6	379	53.8	190	27.0	30	4.3	2.21
Aptitude	Q54	92	13.1	401	57.0	193	27.4	16	2.3	2.19
Training	Q55	123	17.5	398	56.5	147	20.9	34	4.8	2.13
Adapting	Q56	51	7.2	225	32.0	340	48.3	86	12.2	2.66
JobImp	Q57	205	29.1	401	57.0	81	11.5	15	2.1	1.87
OrgClimate	Q58	285	40.5	314	44.6	86	12.2	17	2.4	1.76
Adapting	Q59	151	21.4	496	70.5	54	7.7	1	0.1	1.86
Standards	Q60	100	14.2	536	76.1	64	9.1	2	0.3	1.95
Responsibility	Q61	96	13.6	336	47.7	225	32.0	45	6.4	2.31
Participation	Q62	138	19.6	342	48.6	204	29.0	18	2.6	2.15
GroupPerf	Q63	46	6.5	306	43.5	257	36.5	93	13.2	2.57
Recognition	Q64	85	12.1	340	48.3	216	30.7	61	8.7	2.36
Feedback	Q65	225	32.0	345	49.0	98	13.9	34	4.8	1.92
Responsibility	Q66	208	29.5	457	64.9	35	5.0	2	0.3	1.76
ProblemSlvg	Q67	203	28.8	434	61.6	58	8.2	7	1.0	1.81
CoWorkers	Q68	107	15.2	299	42.5	245	34.8	51	7.2	2.34
Expectations	Q69	49	7.0	381	54.1	251	35.7	21	3.0	2.35
Aptitude	Q70	135	19.2	423	60.1	120	17.0	24	3.4	2.05
JobDsgn	Q71	90	12.8	429	60.9	164	23.3	19	2.7	2.16
Coaching	Q72	79	11.2	277	39.3	266	37.8	80	11.4	2.49
Recognition	Q73	189	26.8	337	47.9	158	22.4	18	2.6	2.01
JobInv	Q74	60	8.5	394	56.0	234	33.2	14	2.0	2.29
Resources	Q75	31	4.4	260	36.9	345	49.0	66	9.4	2.64
JobDsgn	Q76	113	16.1	448	63.6	131	18.6	10	1.4	2.05
JobDsgn	Q77	270	38.4	392	55.7	32	4.5	8	1.1	1.68
Aptitude	Q78	97	13.8	349	49.6	225	32.0	31	4.4	2.27
Resources	Q79	73	10.4	521	74.0	92	13.1	16	2.3	2.07
Attitude	Q80	159	22.6	435	61.8	100	14.2	8	1.1	1.94
Resources	Q81	47	6.7	472	67.0	162	23.0	21	3.0	2.22
CoWorkers	Q82	222	31.5	442	62.8	33	4.7	5	0.7	1.75

Attitude	Q83	178	25.3	424	60.2	93	13.2	7	1.0	1.90
Familiarity	Q84	136	19.3	397	56.4	150	21.3	19	2.7	2.07
LikesJob	Q85	245	34.8	392	55.7	58	8.2	7	1.0	1.75
LikesJob	Q86	246	34.9	396	56.2	56	8.0	4	0.6	1.74
OrgClimate	Q87	157	22.3	335	47.6	152	21.6	58	8.2	2.16
Participation	Q88	192	27.3	370	52.6	117	16.6	23	3.3	1.96
JobImp	Q89	274	38.9	388	55.1	38	5.4	2	0.3	1.67
Attitude	Q90	293	41.6	382	54.3	22	3.1	5	0.7	1.63
JobImp	Q91	92	13.1	364	51.7	209	29.7	37	5.3	2.27
LikesJob	Q92	409	58.1	283	40.2	9	1.3	1	0.1	1.43
Expectations	Q93	99	14.1	472	67.0	123	17.5	8	1.1	2.06
ProblemSlvg	Q94	219	31.1	352	50.0	117	16.6	14	2.0	1.89
Recognition	Q95	153	21.7	364	51.7	145	20.6	40	5.7	2.10
Expectations	Q96	130	18.5	380	54.0	170	24.1	22	3.1	2.12
JobDsgn	Q97	106	15.1	421	59.8	152	21.6	23	3.3	2.13
LikesJob	Q98	91	12.9	326	46.3	254	36.1	31	4.4	2.32
JobInv	Q99	157	22.3	460	65.3	75	10.7	10	1.4	1.91
JobImp	Q100	220	31.2	447	63.5	26	3.7	9	1.3	1.75
Cohesive	Q101	155	22.0	373	53.0	149	21.2	25	3.6	2.06
Schedule	Q102	124	17.6	466	66.2	103	14.6	9	1.3	2.00
ProblemSlvg	Q103	222	31.5	412	58.5	63	8.9	5	0.7	1.79
Tools	Q104	86	12.2	482	68.5	129	18.3	5	0.7	2.08
OrgClimate	Q105	136	19.3	306	43.5	247	35.1	13	1.8	2.20
JobInv	Q106	122	17.3	326	46.3	228	32.4	26	3.7	2.23
Recognition	Q107	141	20.0	381	54.1	151	21.4	29	4.1	2.10
Expectations	Q108	93	13.2	444	63.1	141	20.0	24	3.4	2.14
Adapting	Q109	135	19.2	529	75.1	36	5.1	2	0.3	1.86
Participation	Q110	233	33.1	393	55.8	69	9.8	7	1.0	1.79
Coaching	Q111	98	13.9	361	51.3	194	27.6	49	7.0	2.28
Standards	Q112	57	8.1	527	74.9	112	15.9	6	0.9	2.10
Cohesive	Q113	128	18.2	374	53.1	170	24.1	30	4.3	2.15
GroupPerf	Q114	105	14.9	446	63.4	142	20.2	9	1.3	2.08
Cohesive	Q115	197	28.0	386	54.8	103	14.6	16	2.3	1.91
Familiarity	Q116	269	38.2	420	59.7	13	1.8	0	0.0	1.64
GroupPerf	Q117	71	10.1	510	72.4	110	15.6	11	1.6	2.09
Training	Q118	182	25.9	429	60.9	76	10.8	15	2.1	1.89
Responsibility	Q119	273	38.8	393	55.8	34	4.8	2	0.3	1.67
LikesJob	Q120	358	50.9	318	45.2	22	3.1	4	0.6	1.53
JobImp	Q121	422	59.9	270	38.4	9	1.3	1	0.1	1.41
OrgClimate	Q122	207	29.4	396	56.2	85	12.1	14	2.0	1.87
Schedule	Q123	107	15.2	408	58.0	158	22.4	29	4.1	2.16
Familiarity	Q124	113	16.1	437	62.1	144	20.5	8	1.1	2.07
Cohesive	Q125	180	25.6	394	56.0	117	16.6	11	1.6	1.94

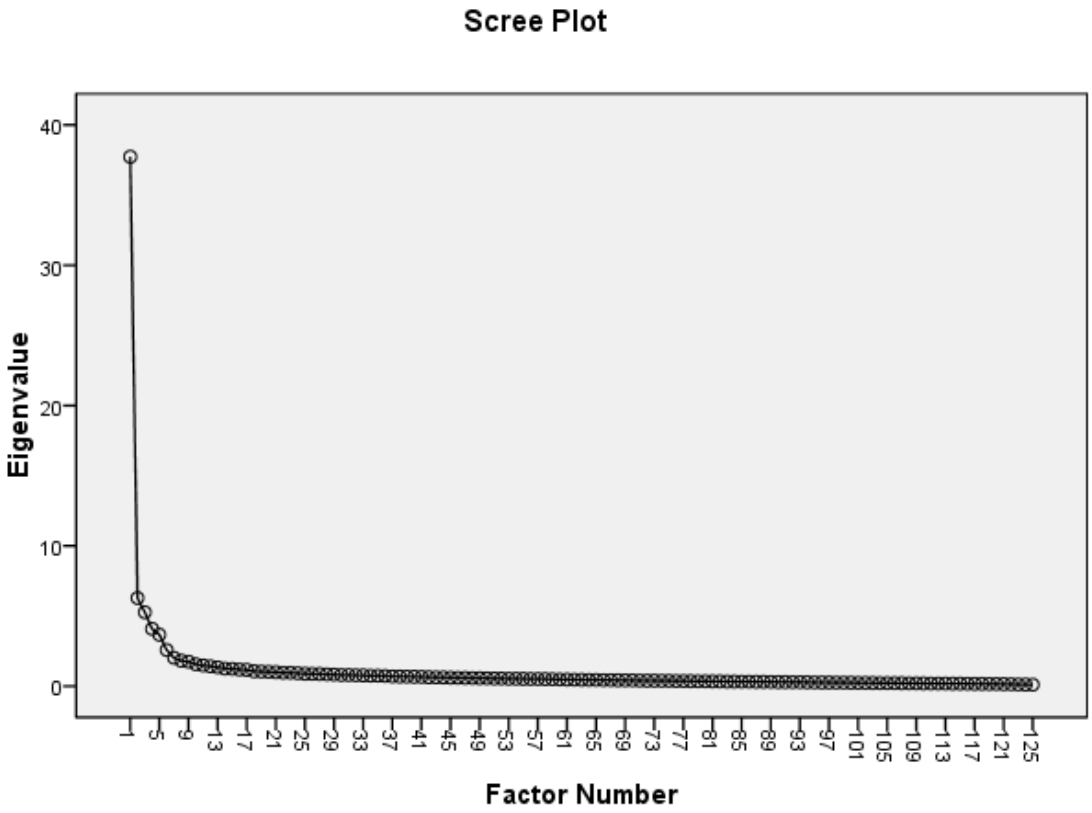

Figure 5. *Scree Plot*

Table 20. *Commonalities for All Items, N* = 125

Element/Item	Number	Initial	Extraction
ProblemSlvg	Q1	0.526	0.334
Resources	Q2	0.488	0.323
Tools	Q3	0.590	0.439
Feedback	Q4	0.703	0.560
Standards	Q5	0.448	0.270
Responsibility	Q6	0.502	0.290
Training	Q7	0.588	0.360
Adapting	Q8	0.385	0.234
Feedback	Q9	0.734	0.631
OrgClimate	Q10	0.490	0.284
Tools	Q11	0.640	0.421
Coaching	Q12	0.758	0.672
JobDsgn	Q13	0.406	0.176
Organized	Q14	0.545	0.324
CoWorkers	Q15	0.556	0.374
Organized	Q16	0.535	0.333
CoWorkers	Q17	0.652	0.585
ProblemSlvg	Q18	0.611	0.493
Feedback	Q19	0.700	0.557
CoWorkers	Q20	0.431	0.228
Participation	Q21	0.706	0.594
Cohesive	Q22	0.586	0.423
Standards	Q23	0.648	0.505
Attitude	Q24	0.556	0.393
JobInv	Q25	0.524	0.367
Familiarity	Q26	0.452	0.283
Adapting	Q27	0.404	0.250
Resources	Q28	0.705	0.477
Recognition	Q29	0.650	0.446
Training	Q30	0.578	0.381
Schedule	Q31	0.592	0.352
Organized	Q32	0.664	0.488
JobInv	Q33	0.699	0.618
Participation	Q34	0.685	0.569
Aptitude	Q35	0.565	0.409
Responsibility	Q36	0.479	0.344
Organized	Q37	0.606	0.453
GroupPerf	Q38	0.513	0.347
Tools	Q39	0.632	0.468
Organized	Q40	0.683	0.510

Attitude	Q41	0.512	0.357
Expectations	Q42	0.675	0.555
Tools	Q43	0.735	0.560
Schedule	Q44	0.578	0.342
Familiarity	Q45	0.530	0.280
Schedule	Q46	0.638	0.432
Coaching	Q47	0.701	0.504
Standards	Q48	0.659	0.473
Coaching	Q49	0.591	0.317
GroupPerf	Q50	0.648	0.483
Aptitude	Q51	0.581	0.422
Feedback	Q52	0.756	0.687
Training	Q53	0.559	0.412
Aptitude	Q54	0.584	0.406
Training	Q55	0.584	0.358
Adapting	Q56	0.316	0.054
JobImp	Q57	0.688	0.471
OrgClimate	Q58	0.688	0.535
Adapting	Q59	0.400	0.173
Standards	Q60	0.591	0.446
Responsibility	Q61	0.732	0.493
Participation	Q62	0.634	0.497
GroupPerf	Q63	0.502	0.310
Recognition	Q64	0.571	0.348
Feedback	Q65	0.698	0.536
Responsibility	Q66	0.588	0.441
ProblemSlvg	Q67	0.614	0.456
CoWorkers	Q68	0.587	0.378
Expectations	Q69	0.574	0.392
Aptitude	Q70	0.583	0.424
JobDsgn	Q71	0.692	0.490
Coaching	Q72	0.778	0.614
Recognition	Q73	0.393	0.196
JobInv	Q74	0.504	0.339
Resources	Q75	0.514	0.377
JobDsgn	Q76	0.609	0.453
JobDsgn	Q77	0.583	0.419
Aptitude	Q78	0.643	0.427
Resources	Q79	0.672	0.528
Attitude	Q80	0.604	0.525
Resources	Q81	0.588	0.468
CoWorkers	Q82	0.617	0.491
Attitude	Q83	0.602	0.482

Familiarity	Q84	0.574	0.423
LikesJob	Q85	0.604	0.431
LikesJob	Q86	0.603	0.487
OrgClimate	Q87	0.572	0.385
Participation	Q88	0.740	0.629
JobImp	Q89	0.575	0.457
Attitude	Q90	0.660	0.482
JobImp	Q91	0.735	0.521
LikesJob	Q92	0.684	0.531
Expectations	Q93	0.587	0.448
ProblemSlvg	Q94	0.694	0.572
Recognition	Q95	0.816	0.608
Expectations	Q96	0.750	0.644
JobDsgn	Q97	0.522	0.315
LikesJob	Q98	0.504	0.248
JobInv	Q99	0.682	0.539
JobImp	Q100	0.622	0.443
Cohesive	Q101	0.801	0.678
Schedule	Q102	0.532	0.324
ProblemSlvg	Q103	0.717	0.563
Tools	Q104	0.619	0.498
OrgClimate	Q105	0.360	0.191
JobInv	Q106	0.504	0.389
Recognition	Q107	0.807	0.612
Expectations	Q108	0.615	0.434
Adapting	Q109	0.421	0.234
Participation	Q110	0.433	0.321
Coaching	Q111	0.715	0.540
Standards	Q112	0.588	0.450
Cohesive	Q113	0.793	0.687
GroupPerf	Q114	0.614	0.433
Cohesive	Q115	0.621	0.493
Familiarity	Q116	0.572	0.417
GroupPerf	Q117	0.524	0.358
Training	Q118	0.449	0.195
Responsibility	Q119	0.617	0.432
LikesJob	Q120	0.637	0.417
JobImp	Q121	0.663	0.470
OrgClimate	Q122	0.697	0.497
Schedule	Q123	0.580	0.354
Familiarity	Q124	0.589	0.440
Cohesive	Q125	0.725	0.639

Extraction Method: Alpha Factoring

Table 21. *Unrotated Factor Matrix for 5 Factors and 125 Items*

Element	Item #	Factor				
		1	2	3	4	5
JobInv	Q99	0.715	0.074	-0.130	-0.063	-0.026
Feedback	Q52	0.712	0.295	-0.236	-0.165	0.097
ProblemSlvg	Q103	0.699	0.199	0.004	-0.178	-0.052
Expectations	Q96	0.690	0.231	-0.264	-0.212	0.017
JobImp	Q91	0.689	0.046	-0.142	-0.145	0.055
Standards	Q23	0.688	-0.107	-0.109	-0.059	-0.069
Participation	Q34	0.686	0.189	-0.140	-0.200	-0.058
Participation	Q88	0.684	0.246	-0.209	-0.238	0.003
Coaching	Q12	0.684	0.275	-0.318	-0.149	0.066
Recognition	Q95	0.682	0.206	-0.234	-0.194	-0.092
Expectations	Q42	0.678	0.179	-0.146	-0.199	0.051
Responsibility	Q61	0.676	0.041	-0.155	-0.098	0.007
OrgClimate	Q122	0.672	-0.068	0.089	-0.166	-0.068
Recognition	Q107	0.670	0.252	-0.244	-0.176	-0.091
Participation	Q21	0.663	0.199	-0.150	-0.297	-0.063
JobImp	Q57	0.662	-0.013	0.065	-0.157	-0.061
ProblemSlvg	Q94	0.661	0.256	-0.088	-0.247	-0.023
Standards	Q48	0.660	-0.074	-0.175	-0.032	0.024
Organized	Q32	0.659	-0.182	-0.050	0.127	-0.047
OrgClimate	Q58	0.653	0.172	-0.106	-0.252	-0.063
JobDsgn	Q71	0.653	-0.236	-0.070	-0.029	0.045
Organized	Q40	0.652	-0.267	-0.014	0.112	0.007
Feedback	Q9	0.649	0.260	-0.295	-0.233	0.029
ProblemSlvg	Q67	0.645	0.068	0.098	-0.096	-0.129
Cohesive	Q101	0.644	-0.027	0.047	0.101	-0.50
Expectations	Q93	0.644	-0.072	-0.093	0.043	0.134
JobDsgn	Q76	0.644	0.080	-0.125	-0.113	0.065
ProblemSlvg	Q18	0.642	0.082	0.101	-0.225	-0.113
Cohesive	Q113	0.641	-0.023	0.076	0.098	-0.510
JobInv	Q33	0.641	0.389	-0.192	-0.132	0.039
Recognition	Q29	0.639	0.046	-0.134	-0.04	-0.126
Standards	Q60	0.638	-0.128	-0.036	0.118	0.086
Coaching	Q72	0.637	0.209	-0.355	-0.179	0.078
Organized	Q37	0.626	-0.209	-0.018	0.116	-0.058
Tools	Q104	0.626	-0.252	-0.088	0.172	0.070
GroupPerf	Q50	0.618	-0.010	0.041	0.086	-0.303
Feedback	Q19	0.617	0.221	-0.267	-0.234	0.044
Tools	Q39	0.614	-0.210	-0.068	0.198	0.052
Feedback	Q4	0.613	0.222	-0.231	-0.278	-0.065
Participation	Q62	0.611	0.230	-0.175	-0.155	0.126

Aptitude	Q70	0.601	0.091	-0.134	-0.088	-0.169
Feedback	Q65	0.599	0.283	-0.228	-0.206	-0.057
Tools	Q43	0.599	-0.342	-0.152	0.234	0.084
OrgClimate	Q87	0.594	-0.071	0.086	-0.139	-0.023
Responsibility	Q119	0.593	0.242	0.098	-0.109	0.008
Cohesive	Q22	0.592	-0.044	0.232	-0.038	-0.123
Resources	Q81	0.587	-0.250	-0.190	0.146	0.057
Standards	Q112	0.586	-0.233	-0.071	0.037	0.216
Familiarity	Q84	0.585	0.174	-0.111	-0.004	-0.196
Schedule	Q46	0.584	-0.256	0.003	0.155	0.040
Training	Q30	0.579	-0.161	-0.094	0.075	0.076
Resources	Q79	0.577	-0.309	-0.162	0.262	0.069
Training	Q53	0.576	-0.075	-0.235	0.111	0.083
Cohesive	Q125	0.576	0.003	0.160	0.187	-0.497
LikesJob	Q86	0.574	0.011	0.358	-0.161	0.059
Expectations	Q108	0.573	-0.289	-0.111	0.073	0.070
Tools	Q3	0.569	-0.250	-0.215	0.053	0.057
Aptitude	Q78	0.568	-0.164	-0.188	0.172	0.111
Coaching	Q111	0.565	0.274	-0.310	-0.163	0.151
CoWorkers	Q17	0.563	0.003	0.076	0.110	-0.500
Aptitude	Q35	0.561	-0.053	0.054	0.156	-0.254
GroupPerf	Q38	0.561	0.028	0.146	0.071	-0.068
Recognition	Q64	0.557	-0.021	-0.164	0.004	-0.099
Organized	Q16	0.556	-0.143	0.051	0.014	-0.015
Training	Q7	0.555	0.140	-0.114	-0.138	-0.008
Expectations	Q69	0.554	-0.210	-0.102	0.119	0.128
Resources	Q28	0.553	-0.335	-0.126	0.161	0.131
Coaching	Q47	0.553	0.255	-0.293	-0.163	0.142
CoWorkers	Q82	0.553	0.063	0.159	0.089	-0.385
Aptitude	Q54	0.546	-0.162	-0.082	0.182	-0.204
Organized	Q14	0.545	-0.117	0.105	-0.039	0.028
Training	Q55	0.544	-0.102	-0.160	0.151	0.056
Responsibility	Q66	0.544	-0.013	0.342	-0.071	0.155
Schedule	Q31	0.541	-0.191	-0.043	0.143	0.028
Tools	Q11	0.536	-0.303	-0.126	0.117	0.108
Resources	Q2	0.535	-0.163	-0.006	0.037	0.093
Schedule	Q102	0.527	-0.164	0.063	0.106	0.067
Schedule	Q44	0.526	-0.129	0.025	0.214	0.038
Aptitude	Q51	0.523	0.001	0.102	0.084	-0.362
CoWorkers	Q68	0.522	-0.093	0.000	0.155	-0.268
JobDsgn	Q97	0.522	-0.203	-0.024	-0.012	0.013
ProblemSlvg	Q1	0.522	0.168	-0.05	-0.176	0.015
Familiarity	Q45	0.516	-0.012	0.032	0.097	-0.054

GroupPerf	Q117	0.506	-0.256	0.023	0.158	0.108
CoWorkers	Q15	0.503	0.046	0.147	0.064	-0.304
JobImp	Q100	0.499	-0.073	0.397	-0.088	0.153
Cohesive	Q115	0.496	-0.034	0.219	0.180	-0.407
Attitude	Q90	0.492	-0.015	0.445	-0.198	0.036
Schedule	Q123	0.490	-0.299	-0.009	0.152	0.034
Standards	Q5	0.488	-0.090	-0.070	-0.079	0.112
GroupPerf	Q63	0.477	-0.235	-0.120	0.111	0.025
Coaching	Q49	0.469	0.218	-0.164	-0.051	0.139
Familiarity	Q116	0.468	0.109	0.255	0.148	-0.314
LikesJob	Q85	0.452	-0.063	0.425	-0.100	0.180
JobInv	Q106	0.452	0.400	-0.119	-0.051	0.093
LikesJob	Q120	0.448	-0.055	0.409	-0.214	0.018
JobDsgn	Q77	0.443	-0.083	0.440	-0.061	0.138
Participation	Q110	0.440	0.241	0.176	0.065	0.186
Responsibility	Q6	0.439	-0.112	0.260	-0.123	0.047
Resources	Q75	0.438	-0.298	-0.192	0.193	0.148
JobInv	Q74	0.420	0.266	-0.187	0.122	0.204
Responsibility	Q36	0.420	0.089	0.375	-0.043	0.132
Training	Q118	0.403	-0.053	-0.009	0.134	0.108
LikesJob	Q98	0.379	-0.172	0.196	-0.010	0.191
JobDsgn	Q13	0.378	-0.131	0.119	-0.008	0.039
Adapting	Q8	0.372	0.006	0.263	-0.133	0.092
Familiarity	Q26	0.353	0.179	0.171	0.196	-0.243
OrgClimate	Q10	0.351	0.338	0.021	0.212	0.033
Adapting	Q59	0.348	0.010	0.162	-0.053	0.151
Adapting	Q27	0.339	0.028	0.328	0.008	0.163
Adapting	Q109	0.303	-0.005	0.236	0.012	0.294
Attitude	Q80	0.070	0.502	0.153	0.478	0.124
Attitude	Q83	0.326	0.460	0.051	0.374	0.144
GroupPerf	Q114	0.195	0.457	0.123	0.414	0.000
JobInv	Q25	0.254	0.455	-0.052	0.277	0.126
Attitude	Q41	0.137	0.437	0.096	0.366	0.068
Attitude	Q24	0.186	0.436	0.091	0.392	0.075
OrgClimate	Q105	-0.170	0.381	0.067	0.091	0.065
CoWorkers	Q20	0.236	0.333	0.078	0.228	-0.061
Recognition	Q73	0.234	0.300	0.114	0.146	0.129
JobImp	Q121	0.35	0.037	0.549	-0.205	0.057
LikesJob	Q92	0.394	0.062	0.545	-0.253	0.108
JobImp	Q89	0.446	0.026	0.479	-0.114	0.122
Familiarity	Q124	0.306	0.396	0.124	0.416	0.040
Adapting	Q56	-0.088	0.006	-0.098	0.147	0.123

Note: Extraction Method: Alpha Factoring. 5 factors extracted and 39 iterations required

Table 22. *Rotated Factor Matrix, Elements, and Item Numbers*

Element	Item #	Factor				
		1	2	3	4	5
Feedback	Q9	.747				
Coaching	Q12	.745				
Feedback	Q52	.741				
Expectations	Q96	.732				
Participation	Q88	.722				
Coaching	Q72	.720				
JobInv	Q33	.703				
Recognition	Q107	.699				
Feedback	Q19	.698				
Feedback	Q4	.698				
Recognition	Q95	.689				
Participation	Q21	.688				
Coaching	Q111	.681				
Feedback	Q65	.680				
ProblemSlvg	Q94	.661				
Coaching	Q47	.658				
Participation	Q34	.644				
Expectations	Q42	.642				
OrgClimate	Q58	.627				
Participation	Q62	.621				
ProblemSlvg	Q103	.579				
JobImp	Q91	.560				
JobInv	Q99	.539				
Responsibility	Q61	.531				
JobInv	Q106	.527				
JobDsgn	Q76	.525				
Training	Q7	.506				
Aptitude	Q70	.489				
ProblemSlvg	Q1	.489				
Coaching	Q49	.477				
ProblemSlvg	Q18	.469				
Recognition	Q29	.469				
Familiarity	Q84	.464				
Responsibility	Q119	.462				
JobImp	Q57	.423				
ProblemSlvg	Q67	.402				
Tools	Q43		.716			

Element	Item #	Factor				
		1	2	3	4	5
Resources	Q79		.694			
Resources	Q28		.659			
Tools	Q104		.634			
Resources	Q81		.621			
Tools	Q11		.607			
Tools	Q39		.604			
Resources	Q75		.602			
Organized	Q40		.601			
Expectations	Q108		.589			
Aptitude	Q78		.582			
Tools	Q3		.579			
Schedule	Q46		.575			
Standards	Q112		.574			
Expectations	Q69		.562			
Organized	Q32		.557			
JobDsgn	Q71		.548			
Schedule	Q123		.545			
GroupPerf	Q117		.541			
Organized	Q37		.538			
Standards	Q60		.536			
Training	Q30		.515			
Schedule	Q31		.514			
Training	Q53		.513			
GroupPerf	Q63		.506			
Training	Q55		.502			
Expectations	Q93		.501			
Schedule	Q44		.484			
Standards	Q48	.448	.475			
Aptitude	Q54		.470			
Standards	Q23	.428	.462			
Schedule	Q102		.457			
Resources	Q2		.457			
JobDsgn	Q97		.438			
Organized	Q16		.408			
LikesJob	Q92			.706		
JobImp	Q121			.663		
JobImp	Q89			.636		
Attitude	Q90			.629		

Element	Item #	Factor				
		1	2	3	4	5
LikesJob	Q85			.610		
JobDsgn	Q77			.595		
JobImp	Q100			.595		
LikesJob	Q86			.585		
LikesJob	Q120			.583		
Responsibility	Q66			.561		
Responsibility	Q36			.520		
Adapting	Q27			.446		
Responsibility	Q6			.441		
Adapting	Q8			.429		
Cohesive	Q113				.714	
Cohesive	Q125				.711	
Cohesive	Q101				.700	
CoWorkers	Q17				.679	
Cohesive	Q115				.613	
CoWorkers	Q82				.587	
Aptitude	Q51				.543	
Familiarity	Q116				.524	
GroupPerf	Q50				.510	
CoWorkers	Q15				.491	
Aptitude	Q35				.459	
CoWorkers	Q68				.447	
Familiarity	Q26				.410	
Attitude	Q80					.720
Attitude	Q83					.651
GroupPerf	Q114					.634
Familiarity	Q124					.621
Attitude	Q24					.616
Attitude	Q41					.590
JobInv	Q25					.552
OrgClimate	Q10					.435
CoWorkers	Q20					.412

Note: Extraction Method: Alpha Factoring. Rotation Method: Varimax with Kaiser Normalization. Rotation converged in 7 iterations. Items loading below .30 were removed.

Table 23. *Factor 1 Relationship, Correlation Matrix, N* = 702

Item	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	*M*	*SD*
1. Q9	1																						1.92	.739
2. Q12	.678	1																					2.18	.808
3. Q52	.705	.742	1																				2.05	.783
4. Q96	.647	.627	.673	1																			2.12	.734
5. Q88	.603	.621	.628	.662	1																		1.96	.755
6. Q72	.569	.697	.644	.610	.613	1																	2.49	.839
7. Q33	.620	.633	.676	.577	.581	.569	1																1.99	.802
8. Q107	.609	.585	.611	.644	.609	.545	.580	1															2.10	.757
9. Q19	.703	.639	.681	.680	.600	.568	.548	.612	1														1.98	.763
10. Q4	.622	.597	.599	.564	.613	.494	.619	.519	.519	1													1.77	.848
11. Q95	.597	.572	.590	.653	.608	.544	.592	.849	.580	.542	1												2.10	.802
12. Q21	.603	.572	.580	.582	.623	.514	.579	.566	.557	.694	.564	1											1.72	.727
13. Q111	.554	.651	.602	.520	.535	.715	.555	.535	.488	.471	.543	.491	1										2.28	.787
14. Q65	.598	.577	.577	.567	.654	.531	.566	.557	.515	.672	.568	.647	.498	1									1.92	.805
15. Q94	.595	.576	.592	.587	.620	.500	.596	.561	.499	.609	.595	.602	.496	.569	1								1.89	.740
16. Q47	.498	.603	.572	.519	.513	.749	.540	.470	.493	.455	.457	.471	.682	.448	.461	1							2.43	.856
17. Q34	.613	.581	.605	.569	.582	.502	.588	.562	.546	.638	.560	.642	.455	.613	.585	.422	1						1.86	.695
18. Q42	.626	.572	.615	.632	.576	.494	.583	.556	.601	.547	.560	.572	.479	.515	.565	.485	.553	1					1.84	.674
19. Q58	.526	.534	.549	.519	.625	.499	.515	.564	.491	.570	.558	.578	.443	.559	.535	.452	.570	.508	1				1.76	.756
20. Q62	.492	.560	.570	.602	.609	.574	.500	.525	.529	.473	.496	.543	.489	.492	.462	.532	.443	.493	.495	1			2.15	.755
21. Q103	.526	.519	.549	.550	.595	.495	.533	.542	.475	.546	.551	.559	.442	.492	.655	.452	.559	.529	.565	.523	1		1.79	.624
22. Q91	.499	.537	.540	.586	.554	.591	.476	.535	.533	.431	.547	.482	.492	.438	.466	.493	.450	.483	.476	.548	.493	1	2.27	.753

Note: All correlations are significant at the 0.01 level (2-tailed).

Table 24. *Factor 2 Job Design, Correlation Matrix*, $N = 702$

Item	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	*M*	*SD*
1. Q43	1																2.01	.569
2. Q79	.652	1															2.07	.567
3. Q28	.726	.567	1														1.99	.588
4. Q104	.587	.588	.555	1													2.08	.574
5. Q81	.502	.550	.456	.492	1												2.22	.607
6. Q11	.643	.538	.644	.507	.444	1											2.02	.607
7. Q39	.621	.519	.577	.545	.456	.555	1										1.92	.475
8. Q75	.459	.475	.492	.440	.420	.459	.355	1									2.64	.713
9. Q40	.550	.456	.491	.499	.443	.440	.609	.309	1								1.96	.558
10. Q108	.436	.404	.443	.446	.450	.395	.440	.348	.505	1							2.14	.672
11. Q78	.425	.494	.385	.426	.425	.354	.383	.427	.322	.328	1						2.27	.750
12. Q3	.556	.479	.554	.478	.454	.551	.470	.431	.420	.380	.417	1					2.28	.680
13. Q46	.430	.444	.379	.468	.380	.399	.469	.307	.586	.506	.361	.356	1				1.98	.596
14. Q112	.415	.430	.359	.472	.429	.344	.409	.370	.444	.452	.394	.410	.411	1			2.10	.516
15. Q69	.367	.375	.358	.375	.452	.380	.344	.407	.374	.350	.404	.401	.331	.485	1		2.35	.653
16. Q32	.487	.453	.419	.443	.426	.428	.502	.268	.633	.509	.352	.413	.588	.384	.380	1	2.01	.591

Note: All correlations are significant at the .01 level (2-tailed).

Table 25. *Factor 3 Engagement, Correlation Matrix*, $N = 702$

Item	1	2	3	4	5	6	7	8	9	10	*M*	*SD*
1. Q92	1										1.43	.529
2. Q121	.686	1									1.41	.527
3. Q89	.542	.493	1								1.67	.589
4. Q90	.615	.526	.543	1							1.63	.583
5. Q85	.449	.476	.486	.453	1						1.75	.641
6. Q77	.365	.367	.441	.409	.443	1					1.68	.613
7. Q100	.376	.386	.444	.410	.457	.636	1				1.75	.583
8. Q86	.442	.438	.451	.521	.555	.402	.403	1			1.74	.622
9. Q120	.550	.631	.447	.633	.413	.349	.344	.511	1		1.53	.588
10. Q66	.370	.371	.394	.349	.403	.486	.580	.378	.323	1	1.76	.548

Note: All correlations are significant at the .01 level (2-tailed).

Table 26. *Factor 4 Effectiveness, Correlation Matrix, N* = 702

Item	1	2	3	4	5	6	*M*	*SD*
1. Q113	1						2.15	.758
2. Q125	.706	1					1.94	.695
3. Q101	.812	.723	1				2.06	.757
4. Q17	.640	.646	.654	1			1.87	.692
5. Q115	.618	.604	.603	.522	1		1.91	.715
6. Q82	.552	.583	.587	.551	.444	1	1.75	.572

Note: All correlations are significant at the .01 level (2-tailed).

Table 27. *Factor 5 Climate, Correlation Matrix, N* = 702

Item	1	2	3	4	5	6	7	*M*	*SD*
1. Q80	1							1.94	.641
2. Q83	.516	1						1.90	.645
3. Q114	.506	.447	1					2.08	.631
4. Q124	.428	.418	.657	1				2.07	.639
5. Q24	.576	.430	.380	.362	1			1.89	.654
6. Q41	.504	.459	.385	.391	.452	1		1.73	.570
7. Q25	.433	.526	.355	.365	.401	.420	1	1.88	.750

Note: All correlations are significant at the .01 level (2-tailed).