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MODERATING EFFECTS OF TOLERANCE FOR AMBIGUITY ON ROLE
AMBIGUITY AND STRESS: THE IMPACT ON FEEDBACK SEEKING
BEHAVIOR

A Thesis
Presented to the
Faculty of
California State University,
San Bernardino

In Partial Fulfillment
Of the Requirements for the Degree
Master of Science
in
Psychology:
Industrial/Organizational

by
Lorissa Ann Grant


June 2005

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ABSTRACT

As organizations compete to attract and retain high quality employees, factors such as role ambiguity, stress, and an individual's tolerance for ambiguity must be evaluated. Employees face numerous uncertainties when starting a new job. Working under new, different, and often ambiguous circumstances can be a source of stress. For certain individuals, a lack of information regarding how they fit in with the existing staff, organizational structure, and culture as well as what tasks they must carry out is stressful. Organizations thus need to tailor their socialization/induction programs to newcomers' tolerance for ambiguity and provide appropriate role clarity.

The goal of this study was to establish the moderating effect of tolerance for ambiguity (high tolerance for ambiguity versus low tolerance for ambiguity) on the relationship between role ambiguity and stress. Furthermore, this study aimed to examine the indirect effect between role ambiguity and feedback seeking behavior as a result of stress as an intervening variable. One way to possibly reduce role ambiguity and stress is for new

employees to seek feedback from coworkers and/or supervisors to gain the desired role clarity.

There were 430 participants in this study (135 men and 286 women reported their sex). Structural equation modeling (SEM) was used to analyze the estimated model. According to the multiple groups SEM analysis, invariance between high and low tolerance for ambiguity individuals was found (i.e., no moderating effect). Furthermore, no indirect effect between role ambiguity and feedback seeking behavior as a result of stress was found. Examining the entire sample using SEM, a significant indirect effect between role ambiguity and feedback seeking behavior as a result of stress was found. Various implications arise from these findings that are expounded on from an organizational and individual perspective.

DEDICATION

I dedicate my efforts to my late father who always demonstrated pride and support in my educational endeavors. He passed away while I was still completing this degree - I know he would have been proud and pleased to read this thesis.

I also dedicate my efforts to my husband. His support and encouragement made all the difference.

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CHAPTER ONE

INTRODUCTION

Employees face numerous uncertainties when starting a new job. These uncertainties may pertain to coworker and supervisor expectations, performance standards, procedures, policies, and their role in a particular department or the organization as a whole. Working under new, different, and often ambiguous circumstances can be a source of stress. Stress does not only result from overt adjustment problems such as incompatibility with a coworker or supervisor, but becomes apparent in more subtle or unintentional forms such as role ambiguity. For certain individuals, a lack of information regarding how they fit in with the existing staff, organizational structure, and culture is stressful. Employees who have a low tolerance for ambiguity and intend to succeed in their job presumably would make an effort to reduce the uncertainty, thereby reducing their stress as well. As a result, they will most likely set out to achieve clarity regarding their role as well as coworker and supervisor expectations. One way to attain this clarity is to seek feedback from supervisors and/or colleagues. The importance of, and motivation for, gaining

clarity about these role uncertainties will be explored in this study.

The purpose of this study is to examine (1) whether employees' tolerance for ambiguity moderates (i.e., changes or influences) the relationship between role ambiguity and stress and (2) what effect this relationship has on their feedback seeking behavior in the workplace. A person's tolerance for ambiguity or uncertainty refers to his need for clarity. A lack of tolerance for ambiguity is defined as "the tendency to perceive (i.e., interpret) ambiguous situations as sources of threat". On the other hand, a person's tolerance for ambiguity is defined as her "tendency to perceive ambiguous situations as desirable" (Budner, 1962, p. 29). This concept of tolerance for ambiguity will be discussed in further depth because it permeates all the elements of the study. From these definitions, it is evident that people's need for clarity influences their outlook on problematic and stressful situations (i.e., perceived to be threatening or desirable).

Stress is another concept that is germane to all the aspects of this study. Generally, stress can be described as feeling uptight, nervous, fretful, or troubled. Stress

results from the interaction between an environmental stimulus (stressor) and the individual's response. It is defined as "an adaptive response, moderated by individual differences, that is a consequence of any action, situation, or event that places special demands on a person" (Ivancevich & Matteson, 1996, p. 649). Specifically, the special demands that role ambiguity places on employees that result in stress will be examined. Role ambiguity results from a lack of the necessary information available to an organizational position. Without clear instructions and knowledge of their role in executing tasks, employees will not understand what is expected of them. Consequently, they could feel insecure about their position in the company (Pool, 2000). To reduce this level of uncertainty, insecurity, and stress employees might seek feedback from their supervisors/coworkers to meet their expectations and do their job effectively. Attaining "feedback clarifies the behaviour goal contingencies and helps individuals predict future evaluations of their behaviour" (Ashford & Cummings, 1985, p. 68). Feedback is obtained by actively eliciting the information required. However, it is also achieved more passively by means of monitoring others' behavior and

social cues. Inferences from these observations clarify and define appropriate behavior as well as the outcomes or rewards of adhering to such norms (Bennett, Herold & Ashford, 1990).

The envisaged value of this study lies in providing a model that indicates the relationships between the aforementioned constructs. Furthermore, it is believed that the model can be applied in the workplace by employees and supervisors alike, realizing the importance of achieving and providing role clarity. Finally, due to increasing demands in the workplace, providing further empirical knowledge pertaining to stress reduction is an important contribution.

CHAPTER TWO

REVIEW OF THE LITERATURE

Numerous research studies have been conducted on the predictors and outcomes of role ambiguity such as intention to leave the organization (Rizzo, House &, Lirtzman, 1970; Siegall, 2000; Stamper & Johlke, 2002), leadership (Rizzo et al., 1970; Keller, 1989), job satisfaction (Rizzo et al., 1970; Fisher, 2001; Siegall, 2000; O'Driscoll & Beehr, 1994; O'Driscoll & Beehr, 2000; Stamper & Johlke, 2002; Miles & Petty, 1975), performance (Fisher, 2001; Stamper & Johlke, 2002), and Type A personality (Fisher, 2001).

These mentioned antecedents and consequences of role ambiguity provide a sense of its broad effects in the workplace. Existing empirical evidence does not readily indicate positive outcomes associated with role ambiguity. Instead, as purported by the above researchers, role ambiguity has been found to lead to job dissatisfaction, poor performance and intentions to leave an organization. These negative outcomes are arguably due the resultant strain/stress of role ambiguity and employees' inability to cope with such uncertainty. As a result they cannot maintain their level of performance, satisfaction, and

commitment to their job and employer. The question is: how is role ambiguity related to stress? Are there contingencies that affect this relationship? If so, what are they? Is it possible that individuals translate their experienced role ambiguity and stress into positive outcomes, namely role clarity and thus reduced stress? If so, then how? Before exploring these questions, it is necessary to first understand the concept of role ambiguity itself.

Role Ambiguity

Role ambiguity stems from a lack or inconsistency of the necessary information available to a particular organizational position regarding the tasks and responsibilities that must be executed (Menon & Akhilesh, 1994). It is defined according to (1) "the predictability of the outcome or responses to one's behavior, and (2) the existence or clarity of behavioral requirements, often in terms of inputs from the environment, which would serve to guide behavior and provide knowledge that the behavior is appropriate" (Rizzo et al., 1970, p. 156). Looking at the first portion of this definition, *predictability* appears to be key. Employees who have specific and concrete

indicators of their role requirements will better be able to predict the outcome and response to their behavior. This knowledge of their role (i.e., what is expected) provides them with certainty relating to rewards or punishments for their compliance/non-compliance of the given stipulations. Consequently, apparent role expectations result from an ability to predict one another's behavior (Kalliath, Bluedorn &, Strube, 1999).

The second portion of the definition points to the value of ongoing feedback/inputs in a more subtle form. From their observations and sensitivity to cues, such as coworker-manager interactions, politics, and organizational norms, they learn what resources are available to them to do their job effectively. They acquire the required information about the behaviors expected by others from these resources (Morrison, 1993). The role of the supervisor as informant establishes the supervisor-subordinate relationship. Supervisors who provide role clarification reduce role ambiguity and their dissatisfaction with subordinates (Schaubroeck, Ganster, Sime &, Ditman, 1993). O'Driscoll and Beehr (1994) also found that subordinates experience less ambiguity and uncertainty when supervisors initiate structure, set goals,

clarity would thus depend on whether employees perceive ambiguity to be a threat or desirable to their job performance.

Tolerance for Ambiguity

People differ in whether they perceive uncertainty to be deleterious or not (Ashford & Cummings, 1985; Budner, 1962). Those who have a low tolerance for ambiguity presumably have a higher need for clarity, certainty, and confidence in doing their job according to others', and their own, expectations. High tolerance for ambiguity individuals do not foster the same concerns. Two types of tolerance for ambiguity are differentiated in the literature, namely job-related and problem-solving.

Job-related tolerance for ambiguity refers to a person's "concern about his/her standing at work" (Bennett et al., 1990, p. 343). This implies that employees may possess sufficient clarity regarding their tasks, but remain uncertain of their acceptance by colleagues and their relation to them in the workplace. Alternately, individuals may assign greater importance to ensuring that they are in good standing with their coworkers (i.e., reputed for being trustworthy, a hard worker, and achiever)

than attaining certainty about their job per se. It may be that people with low job-related tolerance for ambiguity will engage in higher levels of interaction with their colleagues during and/or after work hours. This degree of socialization can serve to gauge, ascertain, and thereby reduce their distress regarding their standing at work. Individuals with a high tolerance for job-related ambiguity may have less concern, if any, with their standing at work, but greater apprehension pertaining to their success at the job itself.

Problem-solving tolerance for ambiguity refers to "a general intolerance for ambiguity in any task" (Bennett et al., 1990, p. 343). This form of ambiguity hinges on a person's success or failure in a task and whether it is thus considered worthwhile pursuing. An individual with low tolerance for ambiguity in problem-solving must be certain that s/he will successfully execute the task before even attempting it. For instance, a problem would be considered feasible to resolve only if the person believes it has a solution.

Generally, individuals with a low tolerance for ambiguity would be expected to work more effectively in a formalized environment with explicit organizational

expectations, policies, and procedures. Results from a meta-analysis supports this proposition by indicating that role ambiguity is negatively related to formalization (Jackson & Schuler, 1985). Providing written rules and procedures that direct work activities facilitates role clarity perceptions for employees. Budner (1962) postulates that:

Since acceptance of such norms, [rules] and values reduces the extent of perceived ambiguity with which the individual is confronted, individuals who are intolerant of ambiguity should tend to be more conventional than those who are tolerant of ambiguity. (p. 37)

These conventional individuals tend to describe themselves as cautious, ordinary, and timid instead of daring, individualistic, and bold. Structure (i.e., rules, norms, and values) provides security for these employees and reduces their uncertainty pertaining to aspects such as dress code, channels of communication, and being on a first-name basis with everybody.

For others, the rigidity of such a workplace restricts their ability to exercise creativity and decision-making in their jobs (e.g., upper level managers). It is probable

that they have a higher tolerance for ambiguity and perceive it as a desirable component of their performance. Research supports this argument and indicates that need for clarity is influenced by employees' job level (Ivancevich & Donnelly, 1974). Specifically, salesmen were "more innovative, satisfied, and less tense" when their high/low need for clarity was met by top level sales executives (p. 35). On the other hand, both the high and low need for clarity operating employees required more role clarity in terms of additional information and job specifications. Keller (1989) also found that low need for clarity professionals ought to be permitted to structure their own work, whereas those with a high need for clarity require their supervisors to structure and clarify their tasks.

From the above, it is apparent that high need for clarity individuals have a low tolerance for ambiguity. The opposite also holds true. Supervisors and coworkers do not always know which employees require what level of clarity, who has a high/low tolerance for ambiguity, and whether it is associated with job-related or problem-solving ambiguity. It is possible that the individuals themselves are not necessarily aware of the exact cause of their uneasiness. What they do know is that they are

enduring unmet needs, frustration, anxiety and strain:
symptoms of stress.

Stress

Stress is a response to a situation, action, or event that is perceived as a threat to their performance, self-efficacy, or standing at work. The situation, action, or event is the stressor/stimulus. A primary trigger of experienced stress is the uncertainty and newness of a situation. Repeated exposure to the same stimulus probably would not be associated with stress due to its familiarity. For this reason, Ivancevich and Matteson (1996, p. 649) define stress as an "adaptive response". In the workplace, every newcomer experiences an initial degree of stress adapting to a new job and environment. However, with time they do adapt as they become familiar with the procedures, values, and expectations of others.

Another component of the definition of stress proposed by Ivancevich and Matteson (1996, p. 649) is the "special demands" placed on individuals (e.g., new job assignment, new supervisor/ boss, making a mistake at work). These demands pertain to behaviors that are unusual or beyond a person's typical set of abilities. Previous research

findings indicate that higher job demands were associated with higher emotional exhaustion (Rafferty, Friend &, Landsbergis, 2001). Furthermore, problem-solving and time demands were related to psychological strain in the form of anxiety, tension, and physical symptoms/illnesses (Beehr, Glaser, Canali &, Wallwey, 2001). In the same study, Beehr et al. found that high demands were also associated with an increase in job satisfaction, even though the demands were stressful. This finding highlights the potential for a person's response to stress to have positive or negative results. The participants in the study concerned were white-collar employees who are more likely to derive satisfaction and challenge from demanding work. Stressors can thus be translated into positive performance outcomes - for the individual and organization - if perceived to be challenging and have good consequences.

Additional factors determine whether an action, situation, or event results in stress. These factors pertain to the importance, duration, and uncertainty of the stressor (Ivancevich & Matteson, 1996). The importance of the event is a necessary antecedent because, for example, if incumbents believe that their performance on a new project stands them in good stead for a promotion, they

will invest more effort in their performance. They place higher demands on themselves due to the value of the promotion, which results in stress and anxiety to excel. A person experiencing a prolonged job search will experience the event as more stressful than the person who is assured of a job in the family business. The duration of the situation, such as unemployment, results in stress and strain due to the uncertainty and insecurity it poses.

Uncertainty is a source of stress as it results from a lack of clarity about what to expect. For instance, it is undoubtedly better for people to know that they will be laid off, even though the consequences seem negative. They are immediately able to make plans for their future. Not knowing (and the uncertainty associated with it) places undue demands on people. However, as mentioned, demands/stress can be perceived as opportunities and challenges to establish ways to attain the clarity they need. One method to reduce uncertainty in the workplace is seeking feedback from supervisors and/or coworkers.

Feedback Seeking Behavior

Organizations and employees implement different strategies to ameliorate uncertainty in the workplace.

Morrison (1993) highlights certain of these approaches to employee adjustment based on previous research. First, it is proposed that newcomers progress through stages to become socialized to their work environment. Second, organizations facilitate and initiate the adaptation process by implementing specific socialization tactics (e.g., orientation sessions). Third, focus is on the cognitive processes newcomers engage in to make sense of, and cope with, their environment. These three approaches are criticized for portraying employees as passive and reactive participants in their adjustment process, not proactive in initiating changes in the environment.

A proactive individual is:

One who is relatively unconstrained by situational forces and who effects environmental change....Proactive people scan for opportunities, show initiative, take action, and persevere until they reach closure by bringing about change.

(Bateman & Crant, 1993, p. 105)

They are more likely to actively seek out the information they require to reduce role stressors associated with their new position. They tend to follow two approaches to

acquire information or feedback, namely inquiry and monitoring.

Inquiry and Monitoring

Inquiry entails directly asking a person for information. This approach is considered more active than monitoring because the person elicits the required feedback. Monitoring refers to observing a situation or others' behavior to obtain informational cues (Chan & Schmitt, 2000). This method is more passive and less studied by researchers. However, it is still proactive behavior because the individual takes the initiative to attain the information. Monitoring enables an individual to infer performance information from cues such as a supervisor's non-verbal behavior. For instance, supervisors' interaction with subordinates can be a valuable indicator of social norms/rewards in the office (e.g., supervisors may be friendlier or more attentive to the needs of the high-performers compared to the low-achievers). Inquiry may only provide the information the source is willing to share (Fedor, Rensvold & Adams, 1992), whereas monitoring presents underlying messages the source is unaware of or unintentionally conveying.

The two most common sources of information are coworkers and supervisors. Consequently, information inquiry is pivotal to superior-subordinate interactions (Madzar, 2001, p. 221) and coworker relationships. The benefits relate to building relationships, trust, a sense of camaraderie, and working toward shared goals. There are also costs involved with seeking feedback from these informants. One concern is that feedback may leave recipients with added questions and uncertainty, especially if the feedback is negative (Fedor et al., 1992). Monitoring has limited effort costs, due to its passivity, but may not provide individuals with the information they desire. They have to make inferences from their observations. The visibility of inquiry is associated with higher costs. The enquirers obtain the specific information they desire, but run the risk of being perceived as weak, incompetent, or insecure (Callister, Kramer & Turban, 1999).

It is expected, and often encouraged, that newcomers engage in inquiry/monitoring until their tasks and what is expected of them is clarified. The cost of inquiry is thus low for individuals starting a new job. However, the cost of inquiry would be expected to be higher for tenured

employees. Research indicates that inquiry from more tenured employees declines; to avoid the mentioned costs (e.g., incompetent to do the job). They realize that they should have learned the ropes and be less dependent on their supervisor/coworkers. As a result, inquiry is kept at a minimum and uncertainty is dealt with by continuing to monitor situations and others' behavior (Callister, Kramer & Turban, 1999; Ashford and Cummings, 1985).

Employees may also more frequently seek feedback from coworkers/supervisors with whom they have a high quality relationship. The findings suggest that the quality of relationships influences their comfort level in seeking feedback (Callister et al., 1999). Similarly, feedback seeking is positively related to source credibility (Fedor et al., 1992). A supervisor/coworker will more likely be approached when considered a credible source of information/feedback. The feedback sought from credible sources could relate to referent and/or technical information.

Referent and Technical Information

The type of information newcomers seek falls into two categories. First, referent information pertains to role demands and expectations. Second, technical information

refers to how the job must be performed; for example how to execute tasks, use equipment, and prioritize time and tasks (Morrison, 1993). Newcomers presumably seek more technical information than their tenured colleagues because they have to know what the job and responsibilities entail. As mentioned, social costs are associated with continually seeking technical information after occupying a position for a substantial period of time. Subsequently, over time, newcomers seek less technical information due to an increase in their task mastery. Instead, their focus shifts and is directed at seeking more referent information and performance feedback (Morrison; Chan & Schmitt, 2000). They want to ascertain whether they fulfill the expectations of their supervisor and coworkers. Referent information is more frequently obtained from supervisors than coworkers because supervisors have authority to assign tasks and responsibilities, evaluate performance, and allocate rewards. The feedback they receive confirms how well they are aligned with the organization's values, norms, goals, and expectations.

Summary

The above review of previous research findings (pertaining to role ambiguity, tolerance for ambiguity, stress, and feedback seeking behavior) aims at promoting an understanding of these concepts. It is at this juncture that the purpose of this study, as mentioned in the introduction, will be established. The relationships between the constructs will become apparent, based on previous research findings. Furthermore, the proposed theoretical models depicted in Figures 1 and 2 will illustrate how these concepts are hypothesized to be interrelated.

CHAPTER THREE

THE PROPOSED THEORETICAL MODELS

The following proposed theoretical models shown in Figures 1 and 2 indicate the indirect effect between role ambiguity and feedback seeking behavior as a result of stress that will be tested separately for high and low tolerance for ambiguity (i.e., tolerance for ambiguity as a moderator). It is proposed that the strength of the relationships depicted as "a" and "b" in figures 1 and 2 will be weaker and negative for the high tolerance for ambiguity group. Individuals with a high tolerance for ambiguity are expected to be less likely to perceive role ambiguity as a source of stress and thus also less likely to seek feedback to reduce their role ambiguity and stress. Furthermore, it is proposed that the direct relationship between role ambiguity and feedback seeking behavior depicted as "c" in figures 1 and 2 will be not significant in order to test the indirect effect between role ambiguity and feedback seeking behavior as a result of stress. For the low tolerance for ambiguity group, the indirect relationship between role ambiguity and feedback seeking behavior as a

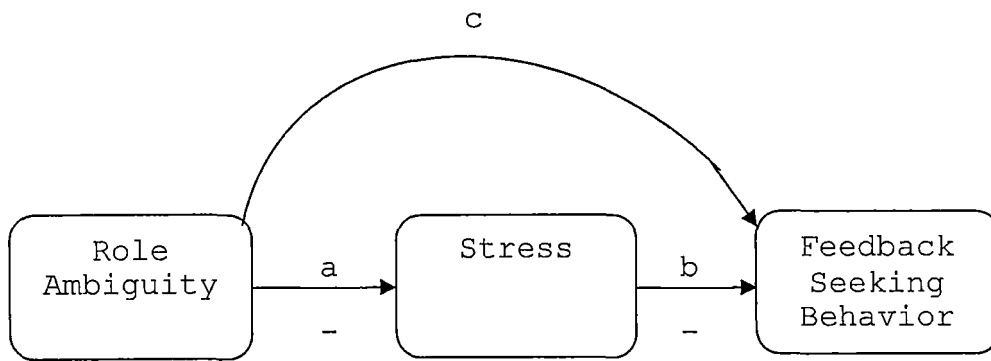


Figure 1. Proposed Theoretical Model of the Moderating Effect of High Tolerance for Ambiguity on Role Ambiguity and Stress: The Impact on Feedback Seeking Behavior

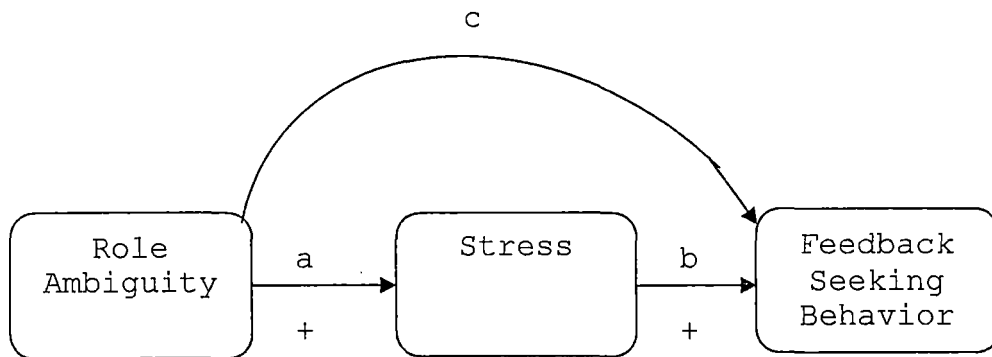


Figure 2. Proposed Theoretical Model of the Moderating Effect of Low Tolerance for Ambiguity on Role Ambiguity and Stress: The Impact on Feedback Seeking Behavior

result of stress is expected to be positive and stronger than the high tolerance for ambiguity group.

Relationships Depicted in the Proposed Theoretical Model

Role Ambiguity → Stress

Role ambiguity is most evident and stressful when newcomers enter a company or position and are confronted with the demands of adjustment and socialization; trying to fit in and learn the ropes. Previous research indicates that role ambiguity tends to be positively correlated with tension (Jackson & Schuler, 1985; Ivancevich & Donnelly, 1974; Pool, 2000), psychological strain (Bliese & Castro, 2000), the strain of depression, and frustration (Beehr, Jex, Stacy & Murray, 2000). Other studies found that role ambiguity is weakly, but positively, correlated with anxiety, absenteeism, and propensity to leave the organization (Rizzo, House & Lirtzman, 1970; Doering & Rhodes, 1996; Jackson & Schuler, 1985; Ivancevich & Donnelly, 1974). Certain employees thus cope with the tension, strain, and anxiety caused by role ambiguity by choosing to leave the organization.

Turnover is hypothesized as one of the chief costs of role strain. Seemingly, if role ambiguity is too severe, employees search for other conditions that are less distressing (Jackson & Schuler, 1985). Accordingly, research suggests that organizations lose their youngest employees mostly due to a lack of role clarity and mobility prospects. These personnel usually have the lowest annual incomes, and when they find attractive opportunities outside the organization, they leave. The costs associated with leaving are perceived to be low compared to the costs of remaining in a stressful work environment. In contrast to these leavers, job changers have enhanced role clarity (Doering & Rhodes, 1996). They are more likely to already possess the required information regarding organizational policies and expectations while holding a previous position in the same company.

The association between role ambiguity and stress is also studied in relation to different jobholders in organizations. In a study of executives who were randomly selected from five functional areas (production, maintenance, finance, personnel, and sales), it was found that role ambiguity caused maximum stress reported by personnel managers, maintenance and sales managers had some

stress, and production and finance managers experienced the least stress (Menon & Akhilesh, 1994). Another study revealed that dual-career couples experience higher levels of stress and role ambiguity than single-career couples (Elloy & Smith, 2003). A further employee group, namely boundary spanners (operate away from the company and manage non-routine tasks) was studied because they tend to experience different role expectations and are likely to deal with high levels of uncertainty. The results indicated that perceived organizational support indirectly reduced the effects of role stress on particular work outcomes for these employees.

From the above research findings, it appears that role ambiguity and stress is positively related. In other words, as role ambiguity increases, the level of stress experienced on the job and/or in the workplace increases. Accordingly, the first proposition is as follows:

Proposition 1: Role ambiguity and stress are positively related. An increase in role ambiguity leads to an increase in stress.

Tolerance for Ambiguity → Role Ambiguity

The title of this thesis implies that tolerance for ambiguity moderates the relationship between role ambiguity

and stress. The dynamic of the role ambiguity-stress relationship thus changes (or is influenced differently) when an individual's tolerance for ambiguity is taken into account. Employees with a high tolerance for ambiguity are expected to be minimally affected by role ambiguity. Conversely, role ambiguity is expected to have a significant impact on newcomers with a low tolerance for ambiguity. They would rely on their supervisors or coworkers to provide them with role clarity.

In the absence of supervisors presenting role clarity, employees with a high need for clarity (i.e., low tolerance for ambiguity) tend to rely on self-produced role definitions. As a result, when "role senders are unclear or in conflict with each other, [they] could be expected to impose their own role expectations upon themselves in order to bring clarity and consistency to the situation" (Jackson & Schuler, 1985, p. 35). However, extended association with ambiguous role expectations may cause such employees to lose their sense of being in control of outcomes. Ultimately, they could develop a learned helplessness where they give up and act helpless (Fisher, 2001). This finding reinforces the predominantly negative outcomes of role

ambiguity for individuals with a low tolerance for ambiguity.

People's tolerance for ambiguity does not directly cause them to improve the negative effects of role ambiguity as Budner (1962, p. 48) points out by stating that:

Ambiguity is a goal which individuals seek to gain or to avoid, or to which they are indifferent. While his degree of tolerance-intolerance of ambiguity may affect the individual's adjustive capacity, it is not directly a lever for manipulating the environment.

The negative consequences of ambiguity create an awareness of employees' low tolerance for ambiguity even if they cannot change it. Individuals who respond indifferently or positively to role ambiguity recognize their high tolerance for ambiguity and are likely to be attracted to environments/jobs that foster an ambiguous climate. These individual ways of contending with ambiguity will manifest in the level of stress resulting from such circumstances.

Tolerance for Ambiguity → Stress

According to Budner (1962) tolerance for ambiguity is a means of evaluating reality, but not managing it. It is not a coping mechanism. It is a trait that signals threatening or desirable situations. In general, threatening situations are usually associated with stress (i.e., fight or flight response). People with a low tolerance for ambiguity probably perceive ambiguity as a threat, and thus a source of stress. The opposite should also be true. Those with a high tolerance for ambiguity presumably evaluate ambiguous situations as desirable, seek them out for the challenges they hold, and do not perceive them as a (negative) source of stress. Research supports these assumptions.

Individuals with a low tolerance for ambiguity/high need for clarity reported increased (job) tension compared to the low need for clarity group (Ivancevich & Donnelly, 1974; Miles & Petty, 1975). Miles and Petty found that this outcome only applies to employees in nonsupervisory roles, not supervisors. A possible explanation is that supervisors find satisfaction/reward in the challenges presented by ambiguity whether they have a high or low tolerance for ambiguity. Perhaps more resources are

available to them to acquire their own role clarity. On the other hand, a different study reveals that supervisors' need for clarity does influence the relationship between role clarity and physical stress (Ivancevich & Donnelly). Those with a low tolerance for ambiguity are susceptible to having trouble getting to sleep, headaches, or upset stomachs. Notwithstanding, high and low need for clarity employees experience less physical stress when they have role clarity, regardless of their position or occupation. Another study examined the relationship between tolerance for ambiguity and psychological strain.

Under conditions of greater [role] ambiguity..., employees with high need for clarity displayed more...psychological strain than did their counterparts who had low need for clarity. At reduced levels of role stressors, the differences between high- and low-need-for-clarity employees were less marked". (O'Driscoll & Beehr, 2000, p. 155)

From these results - relationships between tolerance for ambiguity and role ambiguity, tolerance for ambiguity and stress, and role ambiguity and stress - it appears that a moderating effect is involved. Research supports this

proposition. Need for clarity is found to have a significant moderating effect on role ambiguity and strain (O'Driscoll & Beehr, 2000). Likewise, there is evidence that the role ambiguity-strain relationship is stronger among low tolerance for ambiguity individuals than among high tolerance for ambiguity employees (Frone, 1990).

Accordingly, the second proposition is as follows:
Proposition 2(a): Tolerance for ambiguity moderates the relationship between role ambiguity and stress. Role ambiguity leads to stress, depending on an individual's tolerance for ambiguity. *Proposition 2(b):* Employees with a low tolerance for ambiguity report a higher level of stress when they experience role ambiguity.

Role Ambiguity → Stress → Feedback
Seeking Behavior

Having established the relationship between role ambiguity and stress, based on previous research, there is no need to reiterate how these concepts are related. However, the *highlight* of this study is the addition of the feedback seeking behavior link. The question that this expansion endeavors to address is whether newcomers who experience role ambiguity as stressful tend to engage in feedback seeking behavior to attain the clarity they need

to do their job and adjust to a new work environment.. This is the crux of this study's purpose; to determine whether individuals translate their experienced role ambiguity and stress into positive outcomes (i.e., role clarity and reduced stress). It is proposed that seeking feedback from supervisors and coworkers enables newcomers to achieve these positive outcomes.

In their meta-analysis, Jackson and Schuler (1985) found that feedback from others and feedback from the task is negatively related to role ambiguity. Furthermore, they established that leader consideration and role ambiguity are also negatively related. Leader consideration thus seems to clarify roles for newcomers because expectations are explicated and desired behaviors are rewarded. Jackson and Schuler also verify the negative correlation between leader initiating structure and role ambiguity. Leaders who initiate structure for their newcomers provide information regarding what is expected, which facilitates role clarity. Perceived organizational support (i.e., employees' contributions are valued and their well-being is important) is negatively related to role ambiguity. "Organizations that care about employee well-being are probably more likely to explicate work norms and

expectations, thus directly reducing the amount of...ambiguity [and stress] associated with various employee roles" (Stamper & Johlke, 2003, p. 581). In this way, organizations help employees cope with role stress related to their jobs. Similarly, positive and job-related communication has a strong effect on role strain reduction (Beehr et al., 2000).

The above findings pertain to initiatives by organizations or colleagues to assist newcomers in better managing their role ambiguity/stress. Although efforts on the part of the organization and supervisors are valuable, it is important that individuals take a proactive role in supplementing the information provided by others. Research indicates that proactive newcomers have a high sense of task mastery, role clarity, and social integration when they enter a new job (Chan & Schmitt, 2000). Proactive personality is thus associated with an increase in role clarity. Chan and Schmitt (p. 207) further postulate that:

Each adaptation outcome (i.e., task mastery, role clarity, social integration) increases over time as newcomers learn how to perform their job, learn what their supervisors expect of them, develop personal relationships with their

coworkers, and become more integrated into their work group.

Individuals who are effective at seeking information/feedback presumably have a high level of self-efficacy. They tend to take control of their situation and believe in their competencies and abilities (Ivancevich & Matteson, 1996). They successfully seek, integrate, and use the information obtained to increase their role clarity and performance (Brown et al., 2001; Morrison, 1993; Chan & Schmitt, 2000). Employees with high self-efficacy substantially reduce their role ambiguity when both their inquiry and monitoring (i.e., feedback seeking behaviors) are high. Inquiry and monitoring are thus conditionally, not independently, related to role clarity. Furthermore, role clarity does not improve for employees seeking information if they have low self-efficacy (Brown et al.).

The aforementioned research findings have established that role ambiguity is positively related to stress. Moreover, role ambiguity leads proactive newcomers to seek information from supervisors and coworkers by means of inquiry and monitoring to enhance their role clarity. Consequently, it stands to reason that if role ambiguity leads to stress and feedback seeking behavior, then stress

mediates the relationship between role ambiguity and feedback seeking behavior.

This rationale introduces the following proposition:

Proposition 3: The stress associated with role ambiguity leads employees to seek feedback and establish role clarity.

Tolerance for Ambiguity → Feedback Seeking Behavior

The final relationship to be explored in the proposed model relates to the likelihood that individuals' tolerance for ambiguity will lead them to seek feedback from others to decrease that unmanageable level of ambiguity. As mentioned, the aim of this study is to determine whether individuals translate their affective responses to role ambiguity and stress into positive outcomes (i.e., role clarity and reduced stress). Reference has been made to previous research that supports the moderating effect of tolerance for ambiguity on the relationship between role ambiguity and stress. Previous research has also been shown to support the relationship between role ambiguity and feedback seeking behavior. The anticipation now lies in determining whether employees with a high/low tolerance for ambiguity initiate feedback seeking behavior.

Certainty in this regard should provide sufficient evidence to test whether feedback seeking behavior is instrumental in producing the positive outcomes associated with role ambiguity and stress.

According to Bennett et al. (1990, p. 346) tolerance for ambiguity "clearly plays a role in an individual's decisions to seek feedback". They found that employees with a high tolerance for ambiguity engage in less feedback seeking behavior. On the other hand, individuals in highly ambiguous roles who are less tolerant of ambiguity, seek more feedback (Ashford & Cummings, 1985). Fedor et al. (1992) confirm the negative relationship between eliciting and monitoring behaviors and tolerance for ambiguity in their findings. Employees monitor their environment or solicit information (inquiry) from their supervisors and/or coworkers to gauge their performance and advancement potential (Bennett et al., 1990). They seek this feedback due to their problem-solving tolerance for ambiguity (task uncertainty) and/or job-related tolerance for ambiguity (concerns about their standing at work).

The above evidence introduces the fourth proposition:

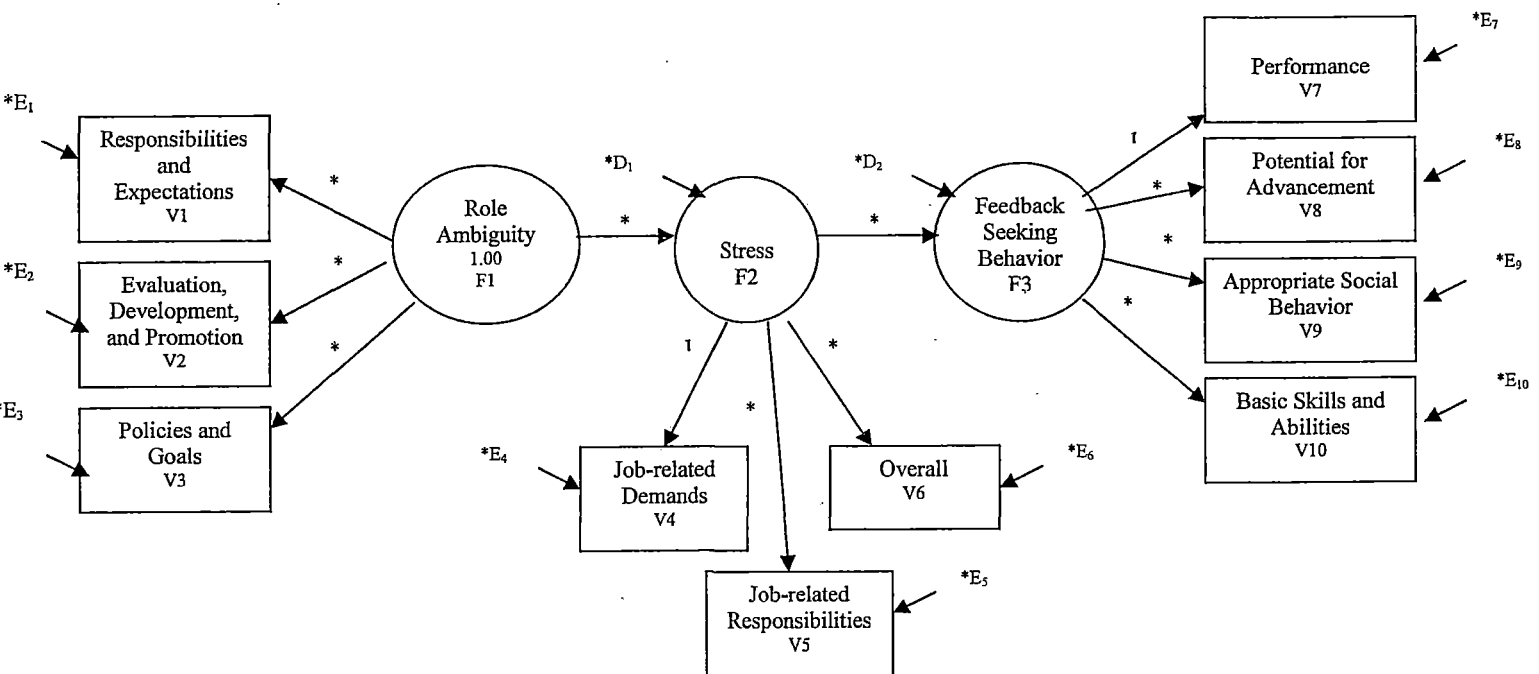
Proposition 4: Individuals with a low tolerance for ambiguity engage in more feedback seeking behavior (than those with a high tolerance for ambiguity).

A summary of the propositions are contained in Appendix A.

The Hypothesized Model

From the aforementioned propositions that explicate the relationships between the constructs of the proposed model, a hypothesized model can be developed. The hypothesized model represents additional information to the proposed models in Figures 1 and 2. Measured variables (i.e., indicators) of the constructs (latent variables) are included in the hypothesized model. In Figures 3 and 4 below, the constructs in the circles signify the latent variables and the squares signify the indicators. The relationships between role ambiguity, a latent variable with three indicators (responsibilities and expectations; evaluation, development, and promotion; and policies and goals), stress, a latent variable with three indicators (job-related responsibilities, job-related demands, and overall), and feedback seeking behavior, a latent variable with four indicators (performance, potential for

Figure 3. Hypothesized Model (for High Tolerance for Ambiguity)



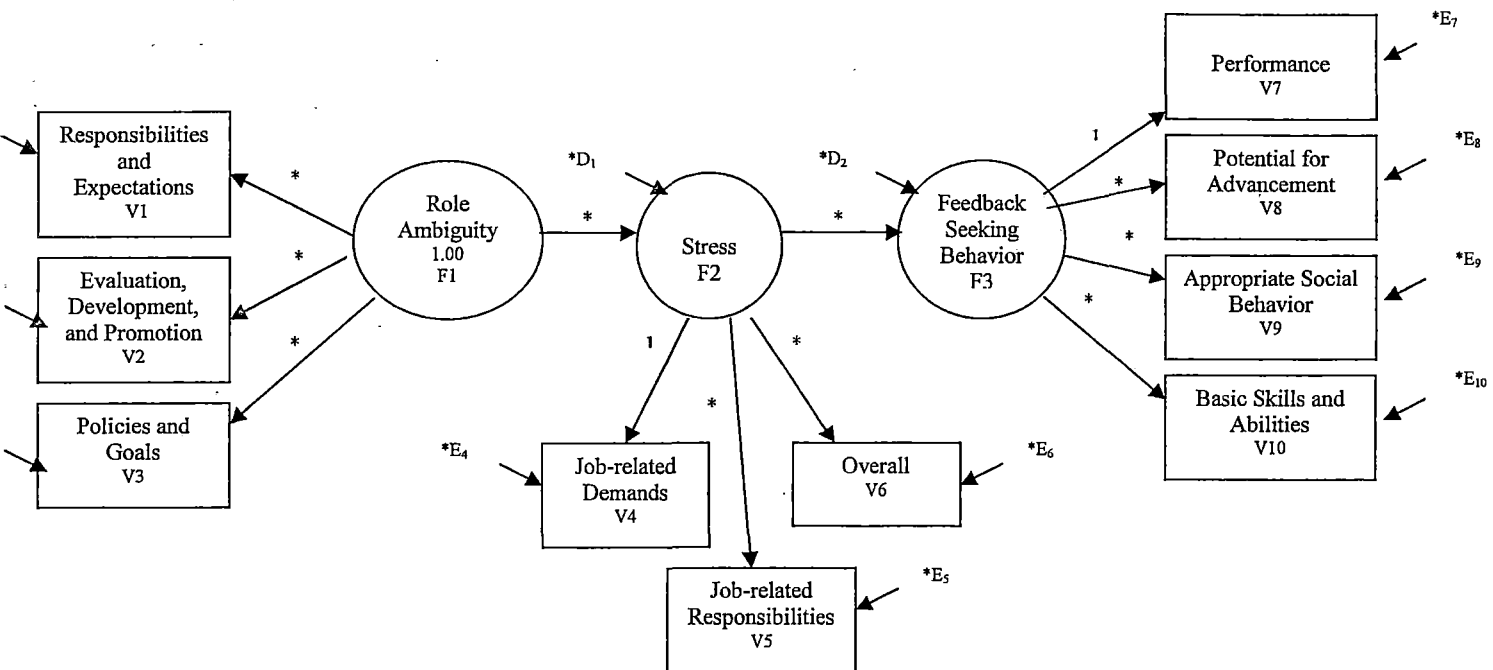


Figure4. Hypothesized Model (for Low Tolerance for Ambiguity)

advancement, appropriate social behavior, basic skills and abilities) will be examined. The arrows between the variables indicate a hypothesized direct relationship. Furthermore, the variables with arrows pointing to them are the dependent variables (DV). Figures 3 and 4 illustrate the hypotheses that (1) stress and feedback seeking behavior have a direct relationship, (2) role ambiguity predicts an increase in job-related and overall stress levels, (3) there is an indirect relationship between role ambiguity and feedback seeking behavior as a result of stress, and (4) the direct relationship between role ambiguity and stress depends on an individual's high or low tolerance for ambiguity. These hypothesized models aim at determining whether, when faced with role ambiguity, individuals with a low tolerance for ambiguity tend to engage in feedback seeking behavior to reduce their level of stress that results from the experienced role ambiguity.

CHAPTER FOUR

METHOD

Participants

Data were collected from a sample of 440 employees appointed in their current position for less than one year. This cutoff period was based on Morrison's study over a four month period and her postulation that "information seeking remains relatively frequent for longer than the 6 months assessed in [her] study" (1993, p. 181). Due to the mentioned costs of feedback seeking behavior (e.g., perceived incompetence) and negative relationship between tenure and feedback seeking behavior, sampling participants with more than one year tenure was not warranted. The participants were employed by the public sector and represented various occupational, age, and gender categories.

Of the 440 participants, 295 were women and 137 were men. The age of the majority of employees was less than 50 years old (110 less than 30 years old, 126 between the ages of 30 and 39, and 117 between the ages of 40 and 49) and 85 participants were older than 50 years of age. Only 3

participants were currently appointed in their first job; for 431 this was not their first job.

A sample size of 400 participants was required for this study based on the recommendation that a sample size of approximately 200 participants is adequate power for a small to medium model. However, 10 participants per estimated parameter (24 parameters) of the two hypothesized models would be preferable (Ullman, 2001). The 24 parameters consist of 13 variances and 11 regression coefficients. Two models were tested through multiple groups analysis (i.e., models representing individuals with (1) high tolerance for ambiguity and (2) low tolerance for ambiguity model).

Design and Procedure

Self-report questionnaires were distributed (by internal mail) to the applicable employees. The purpose of the study (i.e., to assess how each participant responds to uncertainty pertaining to the tasks of their job and their standing at work) was contained in the questionnaire instructions. The participants completed the questionnaires anonymously and voluntarily. They were instructed to place their completed surveys in the sealed

envelopes they were provided with to further protect their anonymity. They returned their questionnaires (via internal mail) to the same department that distributed the survey packets. The surveys were not tampered with at any time until the researcher collected all the returned envelopes.

Measures

Each survey packet contained an authorization/cover letter from the Director of the department that distributed the packets, an informed consent form (see Appendix B), the questionnaire (see Appendix C), and a debriefing form (see Appendix D).

Tenure

A fill-in-the-blank item assessed the participants' tenure by asking, "When did you start working in your current position? month - day - year" A fill-in-the-blank item for the date they completed the survey ("Today's date: month - day - year") established an accurate way to calculate the participants' tenure.

Role Ambiguity

The role ambiguity scale was developed by Rizzo, House &, Lirtzman (1970). House, Schuler, and Levanoni (1983)

reviewed the original scales by Rizzo et al. to determine whether they are an artifact of item wording or true construct differences. They conclude that role ambiguity is not an artifactual construct. Their modified role ambiguity factors were highly correlated with the original items and thus they maintain that continued use of this scale is warranted. Notwithstanding, the reliability for the modified scale is higher (.90) than the original scale (.79). For this reason the modified scale by House et al. was used to measure role ambiguity. Items 8 to 23 in the questionnaire measure the particular dimensions/indicators of role ambiguity referred to in the hypothesized model, namely responsibilities and expectations; evaluation, development, and promotion; and policies and goals. A 5-point Likert scale ranging from 1 = strongly disagree to 5 = strongly agree was used to respond to items, such as "I know what my responsibilities are" and "I don't know what is expected of me". The reliability of the scale in this study was found to be .92 (responsibilities and expectations = .89; evaluation, development, & promotion = .81; policies and goal = .77).

Stress

To measure overall stress, the perceived stress scale (PSS) taken from Cohen, Kamarick, and Mermelsteing (1983) was used (see items 24 to 37 in the questionnaire). The 14-item PSS was "designed to measure the situations in a person's life which are considered stressful. Alpha reliability for this scale was .92" (Elloy & Smith, 2003, p. 61). A 4-point response scale is suggested ranging from 0 = never to 4 = very often. Examples of items include, "In the last month, how often have you been upset because of something that happened unexpectedly?" and "In the last month, how often have you felt nervous and stressed?" The alpha reliability of the scale in the current study was found to be .88.

To measure stress pertaining to job-related demands and job-related responsibilities, the scale developed by House, McMichael, Wells, Kaplan, and Landerman (1979) was applied (see items 38 to 52 of the questionnaire). The coefficient alpha values reported for the five subscales of the occupational stress scale (OSS) range from .59 to .76 for responsibility pressure, .65 to .76 for job versus non-job conflict, .72 for quality concerns, .70 for role conflict, and .73 for workload stress. This 15-item scale

uses a 5-point response scale (1 = not at all to 5 = nearly all the time) to determine how often employees are bothered by items, such as "Not knowing just what the people you work with expect of you" and "Having to deal with or satisfy too many different people". The alpha reliability of the scale in the current study was found to be .88 (job-related responsibilities = .76 and job-related demands = .81)

Tolerance for Ambiguity

A scale presented by Norton (1975) was used to measure job-related tolerance for ambiguity and problem-solving tolerance for ambiguity (see items 53 to 63 of the questionnaire). The internal reliability of the measure of ambiguity tolerance (MAT-50) reported by Norton is .88. A 7-point response scale is suggested ranging from "very strong agreement" to "very strong disagreement". Examples of items include, "In a decision-making situation in which there is not enough information to process the problem I feel very uncomfortable" and "In a situation in which other people evaluate me, I feel a great need for clear and explicit evaluations". The alpha reliability of the scale in the current study was found to be .76.

Feedback Seeking Behavior

The 32-item scale proposed by Ashford and Cummings (1985) was used to measure proactive feedback seeking behavior. The goals of this scale are to (1) determine the performance level of employees, (2) assess their advancement potential, (3) determine whether their social behaviors are appropriate, and (4) assess their skills and abilities for the tasks at hand. These goals are represented as the dimensions/indicators of the feedback seeking behavior construct of the hypothesized model, namely performance, potential for advancement, appropriate social behavior, and basic skills and abilities. For each goal, participants were asked how frequently they seek feedback by means of (1) asking their supervisor, (2) asking their coworkers, (3) comparing themselves with their supervisor, (4) comparing themselves with their coworkers, (5) observing characteristics of those who are rewarded by their supervisor, (6) paying attention to how their supervisor acts toward them, (7) paying attention to how their coworkers act toward them, and (8) using this feedback information to gain clarity about their tasks and/or standing with others in the workplace. These items are contained in the questionnaire: items 64 to 95. A 5-

point response scale was used ranging from "very frequently" to "very infrequently". Examples of items are "I ask my supervisor about my performance level" and "I compare myself with my coworkers to determine whether my social behaviors are appropriate". The reported reliability for this scale was .92 (Ashford & Cummings, 1985). The alpha reliability of this scale in the current study was found to be .95 (performance = .79, potential for advancement = .86, appropriate social behavior = .87, and basic skills and abilities = .83).

Demographics

In addition to the preceding measures, participants responded to items regarding their gender, age, and whether their current job was their first job or not.

CHAPTER FIVE

RESULTS

Assumptions

The assumptions of multivariate normality and linearity were evaluated through SPSS and EQS. Role Ambiguity was moderately negatively skewed and Stress was moderately positively skewed, but did not warrant transformation. There were 3 univariate outliers and 9 multivariate outliers. One woman was found to have a particularly high score job-related demands with a value of 4.78 ($z = 3.94$) and a very low score on responsibilities and expectations with a value of 1.00 ($z = 3.60$). This case was deleted. More than 90% (99.3%) of the participants reported that their current position was not their first job. Using Mahalanobis Distance and cases with the largest contribution to Mardia's coefficient ($p < .001$), nine multivariate outliers were detected and deleted. The multivariate outliers were found to be individuals with high role ambiguity pertaining to evaluation, development, and promotion, have high stress regarding job-related demands, frequently seek feedback

about basic skills and abilities, and are over the age of sixty years old.

The analysis was performed on 430 cases. There were no variables with more than 5% missing data. Job-related and problem-solving tolerance for ambiguity each had 1 case missing; appropriate social behavior, basic skills and abilities, and age had 2 cases missing; first job had 6 cases missing; and tenure and sex each had 8 cases missing, totaling 33 missing cases across the 17 variables. The Little and Rubin's MCAR test indicated that missing values for the data set were missing completely at random. The statistical evidence was $\chi^2(N = 440, 46) = 77.305, p > 0.001$.

After the deletion of outliers, four measured variables (evaluation, development, and promotion with $z = -4.62$; responsibilities and expectations with $z = -5.81$; policies and goals with $z = -5.59$; and job-related demands with $z = 4.66$) were still significantly skewed, $p < .001$ (see Table 1). Therefore, robust maximum likelihood (ML) estimation that adjusts the standard errors and provides the Satorra-Bentler scaled chi-square was applied (Satorra & Bentler, 1988).

The assumption of linearity was assessed by inspecting a few randomly selected scatterplots of pairs of variables, and found to be met (Tabachnick & Fidell, 2001).

Table 1. Skewness, Standard Error of Skewness, and Z-Scores

Variables	Skewness	SE	Z for skewness
Role Ambiguity: responsibilities and expectations	-.68	.12	-5.81
Role Ambiguity: evaluation, development, and promotion	-.54	.12	-4.62
Role Ambiguity: policies and goals	-.66	.12	-5.59
Stress: job-related demands	.55	.12	4.66
Stress: job-related responsibilities	.45	.12	3.84
Stress: overall	.44	.12	3.77
Feedback Seeking Behavior: performance	.31	.12	2.65
Feedback Seeking Behavior: potential for advancement	.34	.12	2.89
Feedback Seeking Behavior: appropriate social behavior	.24	.12	2.05
Feedback Seeking Behavior: basic skills and abilities	.35	.12	2.93
Tolerance for Ambiguity: job-related	-.16	.12	-1.32
Tolerance for Ambiguity: problem-solving	-.09	.12	-.77
Tolerance for Ambiguity: philosophy	.26	.12	2.22

The fact that the program converged was also assumed to mean that the covariance matrix was nonsingular. Evaluation of residuals was performed as part of evaluating the model.

Means and standard deviations for the major variables are given in Table 2. Role Ambiguity was found to have a fairly high mean (average ratings close to 4.00 on a 5-point scale), indicating low role ambiguity. Stress was also found to be relatively low (below the mean of 3.00 on a 5-point scale), especially job-related demands with a mean of 2.26. Tolerance for Ambiguity was also fairly low with mean ratings below 4.00 on a 7-point scale, especially philosophy with a mean of 2.90. Feedback Seeking Behavior ratings were average with mean scores close to 3.00 on a 5-point scale (low values indicate high Feedback Seeking Behavior).

Table 2. Means and Standard Deviations

Variables	M	SD
Role Ambiguity: responsibilities and expectations	3.78	.75
Role Ambiguity: evaluation, development, and promotion	3.74	.88
Role Ambiguity: policies and goals	3.70	.81
Stress: job-related demands	2.26	.61
Stress: job-related responsibilities	2.32	.72
Stress: overall	2.42	.53
Feedback Seeking Behavior: performance	2.99	.81
Feedback Seeking Behavior: potential for advancement	3.07	.95
Feedback Seeking Behavior: appropriate social behavior	3.16	.93
Feedback Seeking Behavior: basic skills and abilities	2.95	.87
Tolerance for Ambiguity: job-related	2.90	.67
Tolerance for Ambiguity: problem-solving	3.77	.81
Tolerance for Ambiguity: philosophy	3.93	.72

Multiple Groups Model

Prior to conducting the multiple groups analysis, the assumptions on all the major variables for the two groups (i.e., high tolerance for ambiguity and low tolerance for ambiguity) were evaluated using SPSS and EQS. The median value for overall tolerance for ambiguity was used after unit-summing the measures of tolerance for ambiguity to determine high and low tolerance for ambiguity groups. For

the high tolerance for ambiguity (TA) group, there were certain variables that were significantly skewed, but did not warrant transformation. The skewed variables were responsibilities and expectations with $z = -4.81$; policies and goals with $z = -4.44$; and job-related demands with $z = 4.34$ were somewhat skewed, but did not warrant transformation. Using Mahalanobis Distance and cases with a largest contribution to Mardia's coefficient ($p < .001$), five multivariate outliers were detected and deleted for the high TA group. The analysis was performed on 210 cases. There were no variables with more than 5% missing data. The assumption of linearity was assessed by inspecting a few randomly selected scatterplots of pairs of variables, and found to be met (Tabachnick & Fidell, 2001).

For the low TA group there were no variables that were significantly skewed or had univariate or multivariate outliers. No cases were thus deleted and the analysis was performed on 215 cases. There were no variables with more than 5% missing data. The assumption of linearity was also assessed by inspecting a few randomly selected scatterplots of pairs of variables, and found to be met (Tabachnick & Fidell, 2001).

The determinant of the covariance matrices for the high TA and low TA groups provided by EQS was greater than zero, evidence that there was no multicollinearity or singularity. The fact that the program converged was also assumed to mean that the covariance matrices were nonsingular. According to Mardia's normalized estimates for high and low TA ($p < .001$), robust maximum likelihood (ML) estimation that adjusts the standard errors and provides the Satorra-Bentler scaled chi-square was applied (Satorra & Bentler, 1988).

The SEM model was run separately for high TA and low TA individuals in order to compare the invariance of the two groups. The correlation covariance matrices for the high and low TA groups are contained respectively in Appendices E and F.

For the high TA group, the robust independence model that tests the hypothesis that all variables are uncorrelated was easily rejected, $\chi^2(45, N = 210) = 1040.526, p < 0.01$. The variables in the model are thus related. Of the 210 high TA individuals, 66 were men and 144 were women. The hypothesized model was tested next. A chi-square difference test indicated a significant improvement in fit from the independence model. Support

was found for the hypothesized model in terms of the Satorra-Bentler scaled χ^2 test statistic, comparative fit index (CFI), and Root Mean-Square Error Approximation (RMSEA) with $\chi^2(32, N = 210) = 54.9312, p > .001, CFI = .977, RMSEA = .059$ (90% confidence interval = .031, .084). Twenty-six percent of the variance in Stress was accounted for by Role Ambiguity. Only two percent of the variance in Feedback Seeking Behavior was accounted for Role Ambiguity and Stress. No post-hoc modifications were performed on the basis of the Lagrange Multiplier and Wald tests. The baseline model for high TA with standardized and unstandardized coefficients (significant coefficients are based on the unstandardized coefficients) is given in Appendix G.

For the low TA group, the robust independence model that tests the hypothesis that all variables are uncorrelated was also easily rejected, $\chi^2(45, N = 215) = 954.741, p < 0.01$. The variables in the model are thus related. Of the 215 low TA individuals (who reported their sex), 69 were men and 142 were women. The hypothesized model was tested next. A chi-square difference test indicated a significant improvement in fit from the independence model. Support was found for the hypothesized

model in terms of the Satorra-Bentler scaled χ^2 test statistic, comparative fit index (CFI), and Root Mean-Square Error Approximation (RMSEA) with $\chi^2(32, N = 215) = 45.5531, p > .001, CFI = .985, RMSEA = .045$ (90% confidence interval = .000, .072). Twenty percent of the variance in Stress was accounted for by Role Ambiguity. Only two percent of the variance in Feedback Seeking Behavior was accounted for by Role Ambiguity and Stress. No post-hoc modifications were performed on the basis of the Lagrange Multiplier and Wald tests. The baseline model for low TA with standardized and unstandardized coefficients (significant coefficients are based on the unstandardized coefficients) is given in Appendix H.

The models for high TA and low TA were tested simultaneously in one run with no parameters across the models constrained to be equal to represent the baseline model, Satorra-Bentler $\chi^2(64, N = 425) = 100.7411, p > .001, CFI = .981, RMSEA = .037$ (90% confidence interval = .022, .05). The indicators of Role Ambiguity were then constrained to be equal and the model was compared to the baseline model with a chi-square difference test that was found to be not significant, Satorra-Bentler $\chi^2(67, N = 425) = 106.6513, p < .05, CFI = .979$, adjusted Satorra-Bentler χ^2

difference test(3) = 5.89, $p > .05$. The indicators of Stress were then constrained to be equal and the model was compared to the previous model. The chi-square difference test was found to be not significant, Satorra-Bentler $\chi^2(69, N = 425) = 108.7850$, $p < .05$, CFI = .979, adjusted Satorra-Bentler χ^2 difference test(2) = 2.33, $p > .05$. Next, the indicators of Feedback Seeking Behavior were constrained to be equal and this model was compared to the previous model. The chi-square difference test was again found to be not significant, Satorra-Bentler $\chi^2(72, N = 425) = 112.6826$, $p < .05$, CFI = .979, adjusted Satorra-Bentler χ^2 difference test(3) = 3.75, $p > .05$. Feedback Seeking Behavior driven by Stress was constrained and compared to the previous model. The chi-square difference test was found to be not significant, Satorra-Bentler $\chi^2(73, N = 425) = 112.7472$, $p < .05$, CFI = .979, adjusted Satorra-Bentler χ^2 difference test(1) = 0.00, $p > .05$. Finally, Stress driven by Role Ambiguity was constrained and compared to the previous model. The chi-square difference test was again found to be not significant, Satorra-Bentler $\chi^2(74, N = 425) = 113.7951$, $p < .05$, CFI = .979, adjusted Satorra-Bentler χ^2 difference test(1) = 1.09, $p > .05$. Table 3 indicates the

models tested, chi-square values, CFI, and adjusted Satorra-Bentler chi-square difference tests.

Table 3. Comparison of Multiple Groups Models

Model	Satorra-Bentler χ^2	df	CFI	χ^2 difference test
Model 1 Hypothesized Model	100.74	64	.98	
Model 2 Constrain Indicators of Role Ambiguity	106.65	67	.98	M1-M2 = 5.89
Model 3 Constrain Indicators of Stress	108.79	69	.98	M2-M3 = 2.33
Model 4 Constrain Indicators of Feedback Seeking Behavior	112.68	72	.98	M3-M4 = 3.75
Model 5 Constrain Feedback Seeking Behavior driven by Stress	112.75	73	.98	M4-M5 = .00
Model 6 Constrain Stress driven by Role Ambiguity	113.80	74	.98	M5-M6 = 1.09

As can be seen from Appendices G and H, all the indicators of the measurement model loaded on their respective latent variable. However, the moderator effect and indirect effect for both groups were found to be not significant. Role Ambiguity significantly predicted Stress for the high and low TA groups (standardized coefficient = -.51 and -.45 respectively, $p < .05$). Stress did not, however, significantly predict Feedback Seeking Behavior.

The multiple groups analysis further identified that there was no significant difference between the high TA and low TA individuals of this sample. All the chi-square difference tests indicated no significant difference between the groups concerned. The final multiple groups model is presented in Appendix I.

As a result of finding no significant difference between high and low TA groups (i.e., no moderator effect) and no significant indirect effect between Role Ambiguity and Feedback Seeking Behavior as a result of Stress as the intervening variable, SEM analysis was run on the combined, invariant high and low TA groups. The purpose is to test the significance of an indirect relationship between Role Ambiguity and Feedback Seeking Behavior as a result of Stress that serves as an intervening variable.

Model Estimation

The analysis was performed on 430 cases. The robust independence model that tests the hypothesis that all variables are uncorrelated was easily rejected, $\chi^2(45, N = 430) = 1934.774, p < 0.01$. The variables in the model are thus related. The hypothesized model was tested next. A chi-square difference test indicated a significant

improvement in fit from the independence model. Strong support was found for the hypothesized model in terms of the Satorra-Bentler scaled χ^2 test statistic with $\chi^2(32, N = 430) = 75.0624, p < .001$. The comparative fit index (CFI) and Root Mean-Square Error Approximation (RMSEA) also show strong support for the hypothesized model with CFI = .977 and RMSEA = .056 (90% confidence interval = .04, .073). No post-hoc modifications were performed on the basis of the Lagrange Multiplier and Wald tests. The final model with standardized and unstandardized coefficients (significant coefficients are based on the unstandardized coefficients) is given in Appendix J. The correlation covariance matrix for the overall TA model is presented in Appendix K.

Measurement Model

All of the indicators of the measurement model loaded on their respective latent variable. Responsibilities and expectations; evaluation, development, and promotion; and policies and goals were indicators of Role Ambiguity (standardized coefficients = .88, .75, .82, $p < .05$). Job-related demands, job-related responsibilities, and overall stress were indicators of Stress (standardized coefficients = .88, .84, .39, $p < .05$). Finally, performance, potential

for advancement, appropriate social behavior, and basic skills and abilities were indicators of Feedback Seeking Behavior (standardized coefficients = .84, .84, .84, .89, $p < .05$).

Direct Effects

Role Ambiguity was predictive of Stress (standardized coefficient = .51, $p < .05$). An increase in Role Ambiguity led to an increase in Stress. Twenty-six percent of the variance in Stress was accounted for by Role Ambiguity. To a small, but significant degree Stress was predictive of Feedback Seeking Behavior (standardized coefficient = .15, $p < .05$). As Stress increased, Feedback Seeking Behavior increased.

Indirect Effects

There was a significant indirect effect between Role Ambiguity and Feedback Seeking Behavior as a result of Stress (standardized coefficient = .05, $p < .05$). The direct effect between Role Ambiguity and Feedback Seeking Behavior was not significant, indicating strong support for an indirect effect only. Two percent of the variance in Feedback Seeking Behavior was accounted for by Role

Ambiguity and Stress. This variance may appear small, but taking the large sample size into consideration, it accounts for important variance in the model.

CHAPTER SIX

DISCUSSION

Summary

As organizations compete to attract and retain high quality employees to replace the mass exodus of "Baby Boomers" within the next five years, factors such as role ambiguity, stress, and an individual's tolerance for ambiguity must be evaluated. Employees face numerous uncertainties when starting a new job. Working under new, different, and often ambiguous circumstances can be a source of stress. For certain individuals, a lack of information regarding how they fit in with the existing staff, organizational structure, and culture as well as what tasks they must carry out is stressful.

Organizations need to start tailoring their internship, orientation/on-boarding, and mentoring programs to newcomers' tolerance for ambiguity. Individuals with a low tolerance for ambiguity would adjust to their new positions more effectively if provided detailed and structured orientation programs. Individuals with a high tolerance for ambiguity would more likely prefer to initiate some of the structure in their new job themselves.

This study aimed at providing a framework of the relationship between role ambiguity experienced by newcomers and the amount of job-related and overall stress that result from such ambiguity. In order to reduce their stress, they would increase their feedback seeking behavior with their supervisors and/or coworkers. Another way to lower their stress would be for organizations to provide role clarity to new employees when starting their new job/position. In order to study these complex relationships, the proposed structural equation model was established. First, multiple groups SEM was examined for a high TA group and a low TA group to study the multifaceted relationships referred to above for individuals with high or low TA.

The multiple groups analysis of the structural equation model presented interesting results. By assessing the fit of the model independently for high and low tolerance for ambiguity individuals, differences between these two groups could be examined. The proposed model fit the data of the low tolerance for ambiguity and high tolerance for ambiguity well without adjustments. However, propositions 2(b) and 4 were not supported because the analyses did not indicate any differences between the low

and high tolerance for ambiguity groups. The relationships between latent variables and indicators for low and high tolerance for ambiguity were similar. Low and high tolerance for ambiguity individuals thus interpreted and responded to questions about role ambiguity, stress, and feedback seeking behavior quite similarly.

A possible explanation for this finding is that the role ambiguity and stress variables were significantly skewed. The majority of the participants in this study reported low role ambiguity and low job-related and overall stress levels. Consequently, individuals with a low or high tolerance for ambiguity tend to respond to low levels of role ambiguity and stress similarly. It is only when role ambiguity is high that differences between individuals, in terms of their propensity for ambiguity tolerance, would be evident.

Furthermore, only the direct relationship between role ambiguity and stress was significant for both groups. The indirect relationship between role ambiguity, stress, and feedback seeking behavior was not significant for either group. It is difficult to state with certainty what caused this effect. A likely explanation is that even though an increase in role ambiguity led to a significant increase in

stress, it did not result in a significant increase in feedback seeking behavior because the increased role ambiguity and stress was fairly low to begin with and did not warrant seeking feedback from supervisors and/or coworkers (to reduce the role ambiguity and stress). The correlations between tolerance for ambiguity (job-related and problem-solving) and feedback seeking behavior were significant. Individuals high in job-related and problem-solving TA engaged in less feedback seeking behavior regarding their potential for advancement, appropriate social behavior, and basic skills and abilities. Only individuals high in problem-solving TA engaged in less feedback seeking behavior regarding their performance. The only significant correlation between low TA and feedback seeking behavior was for individuals concerned about their performance.

Another consideration in terms of this study finding a nonsignificant relationship between role ambiguity and feedback seeking behavior as a result of stress is the perceived cost of eliciting feedback. High feedback seeking costs may dissuade low TA individuals from eliciting additional feedback. For high TA individuals, feedback seeking costs appear less relevant because they

are less likely to seek feedback (Fedor, Rensvold, and Adams, 1992).

A further factor that may have influenced these findings is that the entire sample ($N = 430$) reported that their current job was not their first. Previous research findings suggest that newcomers who have less previous transition experience increased their feedback seeking behavior more rapidly than those with more previous transition experience (Chan & Schmitt, 2000). It is thus possible that as a result of having had previous transition experience, the 99% of the participants in this study perceived their role ambiguity and stress to be lower than if this was their first job. Consequently, feedback seeking behavior was not necessitated.

Tenure may also have played a role. Morrison (1993) suggested that future research should assess whether information seeking remained frequent for longer than six months as examined in her study. For this reason, this study sampled participants who had tenure of more than six months, but less than one year. Significant correlations between tenure and feedback seeking behavior (potential for advancement, performance, and basic skills and abilities) were found. An increase in tenure was associated with

decreased feedback seeking behavior. Significant correlations between tenure and feedback seeking behavior were not found for individuals with tenure of 8 weeks or less, 16 weeks or less, 24 weeks or less, and 36 weeks or less. The findings do not indicate whether less tenure is related with increased feedback seeking behavior.

There were a few unexpected findings from the multiple groups structural equation model analyses in this study. First, the lack of difference demonstrated between the groups of low and high TA individuals. The findings did not support the proposition that low TA individuals differ from high TA individuals in that they experience role ambiguity as more stressful and, as a result, more actively seek feedback from their supervisors and/or coworkers to reduce their role ambiguity and stress.

Second, the indirect effect between role ambiguity and feedback seeking behavior as a result of stress was not significant. It is possible that measures of role ambiguity and feedback seeking behavior were not optimally matched. For instance, is role ambiguity regarding policies and goals well matched and predictive of one or more of the four feedback seeking indicators (e.g., performance, potential for advancement, appropriate social

behavior, basic skills and abilities)? If the indicators of role ambiguity and feedback seeking behavior are not strongly related, it stands to reason that the predictive relationship would be small or not significant.

Third, only the direct effect between role ambiguity and stress was significant and positive. The relationship between stress and feedback seeking behavior was not significant for either group. Various possible explanations were suggested for these findings, but are inconclusive. One explanation that appears to have contributed to the above non-significant findings point to a lack of power. The standard errors for the overall TA SEM analysis were smaller than the standard errors for the multiple groups SEM analysis, resulting in the increased likelihood of establishing significant findings. It appears that a larger sample could have yielded significant findings for the multiple groups SEM analysis: a limitation of this study.

As a result of the surprising, but interesting, findings from the multiple groups SEM, a second analysis was performed on the entire sample of high and low TA individuals. The proposed structural equation model was found to fit the data from this particular sample well.

Significant relationships were found between the latent variables of role ambiguity and stress, and between stress and feedback seeking behavior. As newcomers' role ambiguity increased, their stress increased. This finding supports the first proposition that role ambiguity and stress are positively related. This study has also shown that, as stress increases, feedback seeking behavior increases. However, the small effect size found for the role ambiguity-stress-feedback seeking behavior relationship would indicate that there may be other variables influencing this relationship that should be considered in future research. Nonetheless, due to the large sample used, the small effect size is an important one (i.e., accounting for important variance). In support of proposition three, a significant indirect relationship between role ambiguity and feedback seeking behavior was found as a result of stress. The fact that the direct relationship between role ambiguity and feedback seeking behavior was found to be not significant provides additional support for this proposition. The indirect effect only was found to be significant. This is evidence that individuals who experience role ambiguity do in fact engage in feedback seeking behavior as a result of the

stress that is a product of role ambiguity: a significant finding of this study.

Another finding of this study was that all the indicators for the three latent variables were significant. Role ambiguity is a latent variable indicated by responsibilities and expectations; evaluation, development, and promotion; and policies and goals. Stress is a latent variable indicated by job-related demands, job-related responsibilities, and overall stress. Finally, feedback seeking behavior is a latent variable indicated by performance, potential for advancement, appropriate social behavior, and basic skills and abilities.

Limitations and Suggestions for Future Research

There were three main limitations of this study that should be noted. First, the study used self-report measures. This method was felt to be the best way to assess feedback seeking behavior and perceptions of role ambiguity, stress, and tolerance for ambiguity. A potential problem with self-reports is that participants may not report their perceptions, behaviors, and attitudes accurately. Self-report measures can also contribute to common method bias. Future research should supplement

self-reports with data from supervisors and/or coworkers. Additional methods for collecting data should also be considered (i.e., interviews and observations).

A second limitation was that participants were sampled from the same type of industry. It is possible that personnel employed in the public sector are likely to attend required pre-entry training and orientation programs that reduce their role ambiguity. However, it cannot be assumed that these programs ensure clarity regarding newcomers' tasks, responsibilities, and standing with their supervisor and coworkers. Nonetheless, future research should investigate newcomer behavior across different organizations/industries so that issues of generalizability can be addressed more clearly.

The final limitation was a lack of power for the multiple groups SEM to produce significant moderator and indirect effects. It is evident that multiple groups SEM analyses require large samples to indicate significant differences between the groups as well as moderator and/or indirect effects. Future research thus requires a larger sample of employees in order to establish support for the propositions pertaining to moderator effects given in this study.

Additional considerations to be made for future research include achieving an improved match/relatedness between the role ambiguity and feedback seeking behavior. This development may then lead to significant findings for the indirect relationship between role ambiguity and feedback seeking behavior as a result of stress for high and low tolerance for ambiguity groups. Finally, tolerance for ambiguity should be examined as a latent variable to test that the indicators load on it.

Implications

There are several implications for employers and employees. Primarily, this study indicated an indirect effect between role ambiguity and feedback seeking behavior as a result of stress. Employers and/or supervisors should ensure that role ambiguity is not the cause of employee stress. Initiatives to reduce role ambiguity include mandatory orientation programs, regular feedback sessions with supervisors/mentors, increased participation in decision-making, and social interaction with peers (Burke, 1993). It is probable that all employees desire a measure of clarity regarding the structure of the organization, their department, and how they fit into those structures.

These manifestations, and perceptions, of organizational support result in decreased role ambiguity (Stamper and Johlke, 2003).

When comparing differences between individuals with high TA and those with low TA, the findings of this study also made an important contribution to understanding these complex relationships. Regardless of whether individuals have high TA or low TA (i.e., there is no difference between the two groups), role ambiguity is predictive of increased stress. As already mentioned, all employees most likely expect a degree of clarity and structure when starting a new job. Furthermore, findings indicated that both high and low TA individuals do not necessarily seek feedback from their supervisors and/or coworkers as a result of role ambiguity and stress. For this reason, the employer should have measures in place that provide role clarity and promote relationships between employees and supervisors/mentors so as to prevent undue role ambiguity and stress.

The above-mentioned implications and suggested measures to improve the work environment for new employees will ensure that they feel valued, invested in, and better adjusted. They will also more likely have increased job

satisfaction (Miles and Petty, 1975; O'Driscoll & Beehr, 1994). With the increasing competition among companies to recruit and retain talented employees, ensuring role clarity and low work stressors will more likely result in increased employee retention (Siegall, 2000). These organizations will then attract skilled and knowledgeable candidates.

In summary, the major objective of this present study was to find evidence supporting a relationship between stress and feedback seeking behavior and reaffirm the established relationship between role ambiguity and stress. Also, it was important to study tolerance for ambiguity. As this study demonstrated, these indirect relationships exist. Although no difference was found for high TA and low TA individuals, the relationship between role ambiguity and stress was established. A case has been made to organizations that investing in programs that provide role clarity may be a worthwhile investment.

APPENDIX A
SUMMARY OF PROPOSITIONS

Proposition 1: Role ambiguity and stress is positively related. An increase in role ambiguity leads to an increase in stress.

Proposition 2(a): Tolerance for ambiguity moderates the relationship between role ambiguity and stress. Role ambiguity leads to stress depending on an individual's tolerance for ambiguity.

Proposition 2(b): Employees with a low tolerance for ambiguity report a higher level of stress when they experience role ambiguity.

Proposition 3: The stress associated with role ambiguity leads employees to seek feedback and establish role clarity.

Proposition 4: Individuals with a high tolerance for ambiguity engage in less feedback seeking behavior than those with a low tolerance for ambiguity.

APPENDIX B
INFORMED CONSENT

INFORMED CONSENT

You are invited to participate in a study that is designed to investigate the relationships between role ambiguity, tolerance for ambiguity, stress, and feedback seeking behavior of employees in the workplace. This study is conducted by Lorissa Grant under the supervision of Dr. Janelle Gilbert, professor of Psychology. This study has been reviewed and approved by the Institution Review Board of California State University San Bernardino.

In this study you will be required to complete a questionnaire that is expected to take approximately 20-30 minutes of your time. Once you have completed the questionnaire, kindly place it in the provided envelope and seal it to further protect your anonymity. Place the envelope in the assigned drop box in the HR office to be collected by the researcher only.

Please be assured that the information you provide will be held in strict confidence by the researchers. At no time will your name be reported along with your responses. All data will be reported in group form only.

Please understand that your participation in this study is voluntary. There is NO penalty to you for

refusing to participate or withdrawing from the study at any time.

If participants have any questions pertaining to this study and/or their rights, please contact Dr. Janelle Gilbert, Professor of Psychology, at (909) 880-5570.

I acknowledge that I have been informed of, and understand, the nature and purpose of this study, and I freely consent to participate.

Indicate your consent with an "X"

Date

APPENDIX C
QUESTIONNAIRE

QUESTIONNAIRE

1. Today's date: _____
month - day - year
2. When did you start working in your current position?

month - day - year
3. Is this your first job? **Yes** / **No** (please circle the appropriate option)
4. Are you **Male** / **Female**? (please circle the appropriate option)
5. What is your age? Younger than 30 ____
30-39 ____
40-49 ____
50-59 ____
60 + ____

1	2	3	4	5
strongly disagree	disagree	uncertain	agree	strongly agree

Concerning my current job:

6. My authority matches the responsibilities assigned to me. ____
7. I don't know what is expected of me. ____
8. My responsibilities are clearly defined. ____
9. I feel certain about how much authority I have. ____
10. I know what my responsibilities are. ____
11. I have clear planned goals and objectives for my job. ____
12. The planned goals and objectives are not clear. ____
13. I don't know how I will be evaluated for a raise or promotion. ____
14. I don't know how to develop my capabilities for future success in my job. ____
15. I often receive unclear orders from my boss. ____
16. I know exactly what is expected of me. ____
17. I work under unclear policies and guidelines. ____
18. I receive clear explanations of what has to be done. ____
19. I don't know what the opportunities are for advancement and promotion. ____
20. I don't know how to improve my performance on the job. ____

21. My supervisor makes it clear how s/he will evaluate my performance. ____

1	2	3	4	5
never	almost never	sometimes	fairly often	very often

In my life (generally; not only concerning my job), during the last month:

22. I have been upset because of something that happened unexpectedly. ____

23. I have felt that I was unable to control the important things in my life. ____

24. I have felt nervous and "stressed". ____

25. I have dealt successfully with irritating life hassles. ____

26. I have felt that I was effectively coping with important changes occurring in my life. ____

27. I have felt confident about my ability to handle my personal problems. ____

28. I have felt that things were going my way. ____

29. I have found that I could not cope with all the things that I had to do. ____

30. I have been able to control irritations in my life. ____

31. I have felt that I was on top of things. ____

32. I have been angered because of things that happened that was outside of my control. ____

33. I have found myself thinking about things that I have to accomplish. ____

34. I have been able to control the way I spend my time. ____

35. ____ I have felt difficulties were piling up so high that I could not overcome them. ____

Concerning my current job, I feel as though:

36. I do not have enough help and equipment to get the job done well. ____

37. I have too much responsibility for the work of others. ____

38. ____ I'll not be able to meet the conflicting demands of various people I work with. ____

39. I have to do or decide things where mistakes could be quite costly. ____

40. I do not know just what the people I work with expect of me. ____

1	2	3	4	5
never	almost never	sometimes	fairly often	very often

41. The amount of work I have to do may interfere with how well it gets done. ____
42. I have to do things on the job that are against my better judgment. ____
43. My job tends to interfere with my family life. ____
44. I am unable to influence my immediate supervisor's decisions and his/her actions that affect me. ____
45. I have to deal with or satisfy too many different people. ____
46. I am asked to work overtime when I don't want to. ____
47. I am trapped in a job I don't like but can't change and can't get out of. ____
48. My job requires me to work very fast. ____
49. My job requires me to work very hard (physically and mentally). ____
50. My job leaves me with little time to get everything done. ____

1	2	3	4	5	6	7
very strong agreement	strong agreement	agree	uncertain	disagree	strong disagreement	very strong disagreement

My philosophy is that:

51. Almost every problem has a solution. ____
52. I like to fool around with new ideas, even if they are a total waste of time. ____
53. Nothing gets accomplished in this world unless you stick to some basic rules. ____
54. I do not believe that in the final analysis there is a distinct difference between right and wrong. ____
55. Usually, a society with more clearly defined rules is better off. ____
56. Personally, I tend to think that there is a right and a wrong way to do almost everything. ____
57. I prefer the certainty of always being in control of myself. ____

1	2	3	4	5	6	7
very strong agreement	strong agreement	agree	uncertain	disagree	strong disagreement	very strong disagreement

Concerning my current job, I feel as though:

58. I function very poorly whenever there is a serious lack of communication in a job situation. ____
59. In a situation in which other people evaluate me, I feel a great need for clear and explicit evaluations. ____
60. If I am uncertain about the responsibilities of a job, I get very anxious. ____
61. If I were a scientist, I might become frustrated because my work would never be completed (science will always make new discoveries). ____
62. If I were a doctor, I would prefer the uncertainties of a psychiatrist to the clear and definite work of someone like a surgeon or X-ray specialist. ____
55. Once I start a task, I don't like to start another task until I finish the first one. ____
56. Before any important job, I must know how long it will take. ____
57. In a problem-solving group it is always best to systematically attack the problem. ____
58. A problem has little attraction for me if I don't think it has a solution. ____
59. I do not like to get started in group projects unless I feel assured that the project will be successful. ____
60. In a decision-making situation in which there is not enough information to process the problem, I feel very uncomfortable. ____
61. I don't like to work on a problem unless there is a possibility of coming out with a clear-cut and unambiguous answer. ____
62. Complex problems appeal to me only if I have a clear idea of the total scope of the problem. ____
63. A group meeting functions best with a definite agenda. ____

1	2	3	4	5
very	somewhat	uncertain	somewhat	very
frequently	frequently		infrequently	infrequently

I determine how well I am performing in my current job by:

64. Asking my supervisor for feedback. ____
65. Asking my coworker(s) for feedback. ____
66. Comparing myself with my supervisor. ____
67. Comparing myself with my coworker(s). ____

68. Observing the characteristics of those rewarded by my supervisor. ____

69. Paying attention to how my boss acts toward me. ____

70. Paying attention to how my coworker(s) act toward me. ____

____ 71. Using feedback from my supervisor and coworker(s). ____

I assess my potential for advancement within this organization by:

72. Asking my supervisor for feedback. ____

73. Asking my coworker(s) for feedback. ____

74. Comparing myself with my supervisor. ____

75. Comparing myself with my coworker(s). ____

76. Observing the characteristics of those rewarded by my supervisor. ____

77. Paying attention to how my boss acts toward me. ____

78. Paying attention to how my coworker(s) act toward me. ____

____ 79. Using feedback from my supervisor and coworker(s). ____

I determine the appropriateness of my social behavior in the workplace by:

80. Asking my supervisor for feedback. ____

81. Asking my coworker(s) for feedback. ____

82. Comparing myself with my supervisor. ____

83. Comparing myself with my coworker(s). ____

84. Observing the characteristics of those rewarded by my supervisor. ____

85. Paying attention to how my boss acts toward me. ____

86. Paying attention to how my coworker(s) act toward me. ____

____ 87. Using feedback from my supervisor and coworker(s). ____

I assess the adequacy of my basic skills and abilities to do my job by:

88. Asking my supervisor for feedback. ____

89. Asking my coworker(s) for feedback. ____

90. Comparing myself with my supervisor. ____

91. Comparing myself with my coworker(s). ____

92. Observing the characteristics of those rewarded by my supervisor. ____

93. Paying attention to how my boss acts toward me. ____

94. Paying attention to how my coworker(s) act toward me. ____

____ 95. Using feedback from my supervisor and coworker(s). ____

APPENDIX D
DEBRIEFING FORM

DEBRIEFING STATEMENT

Thank you for your participation in this study on the relationships between role ambiguity, stress, tolerance for ambiguity, and feedback seeking behavior.

The questionnaire you completed provided responses to applicable experiences in your workplace. Your responses will contribute to the purpose of this research. This study aims to test whether new employees (employed in their current position for less than one year) with a low tolerance for ambiguity tend to experience role ambiguity as more stressful than those with a high tolerance for ambiguity. Furthermore, this study aims to test whether employees (with a high vs. low tolerance for ambiguity) tend to seek feedback from their coworkers and supervisors to reduce their experienced role ambiguity and stress at work. It is hypothesized that low tolerance for ambiguity individuals tend to experience role ambiguity as more stressful (than high tolerance for ambiguity individuals) and thus seek feedback from their coworkers and supervisors to reduce their level of stress and role ambiguity in the workplace.

If you have questions, please contact me at (909) 792-8182 or lvgrant@netzero.net. You may also contact Dr.

Janelle Gilbert, professor of Psychology, at (909) 880-5570 or Janelle@csusb.edu. You may keep this document for your records.

Your decision whether or not to withdraw your data will not affect your current or future relations with the researcher, Dr. Janelle Gilbert, or your employer.

The results of the study will be available in December 2004.

APPENDIX E
CORRELATION COVARIANCE MATRIX OF LOW TOLERANCE
FOR AMBIGUITY GROUP

	1	2	3	4	5	6	7	8	9	10
1. Responsibilities and expectations	1.0									
2. Evaluation, development, and promotion	.68**	1.0								
3. Policies and goals	.68**	.62**	1.0							
4. Job-related demands	.27**	.28**	.29**	1.0						
5. Job-related responsibilities	.34	.32**	.36**	.73**	1.0					
6. Overall stress	.17	.23**	.21**	.37**	.33**	1.0				
7. Performance	.09	.04	.03	-.04	.00	-.19**	1.0			
8. Potential for advancement	.00	.02	.03	-.15*	-.08	-.15*	.77**	1.0		
9. Appropriate social behavior	.04	.10	.06	-.14*	-.09	-.21**	.66**	.77**	1.0	
10. Basic skills and abilities	.01	.05	.07	-.08	-.04	-.18**	.73**	.73**	.71**	1.0

** $p < .01$ (2-tailed)

* $p < .05$ (2-tailed)

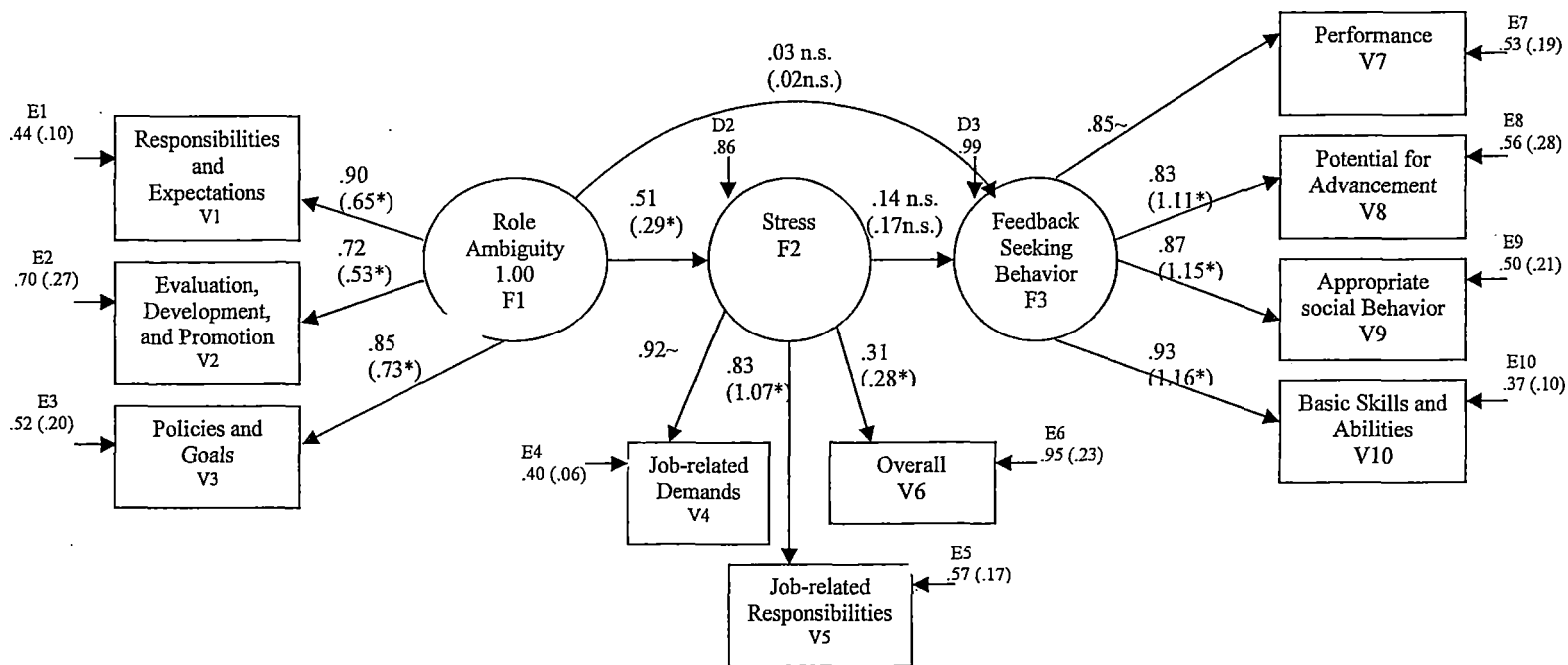
APPENDIX F
CORRELATION COVARIANCE MATRIX OF HIGH TOLERANCE
FOR AMBIGUITY GROUP

	1	2	3	4	5	6	7	8	9	10
1. Responsibilities and expectations	1.0									
2. Evaluation, development, and promotion	.63**	1.0								
3. Policies and goals	.77**	.61**	1.0							
4. Job-related demands	.44**	.31**	.36**	1.0						
5. Job-related responsibilities	.39**	.33**	.31**	.75**	1.0					
6. Overall stress	.31**	.30**	.33**	.28**	.21**	1.0				
7. Performance	.04	.14*	.12	-.06	-.08	-.08	1.0			
8. Potential for advancement	.02	.06	.08	-.12	-.11	-.03	.77**	1.0		
9. Appropriate social behavior	.04	.12	.07	-.14*	-.17*	-.11	.71**	.70**	1.0	
10. Basic skills and abilities	.05	.13	.13	-.13	-.11	-.09	.78**	.76**	.83**	1.0

** $p < .01$ (2-tailed)

* $p < .05$ (2-tailed)

APPENDIX G
BASELINE MODEL FOR HIGH TOLERANCE FOR AMBIGUITY
GROUP



* $p < .05$

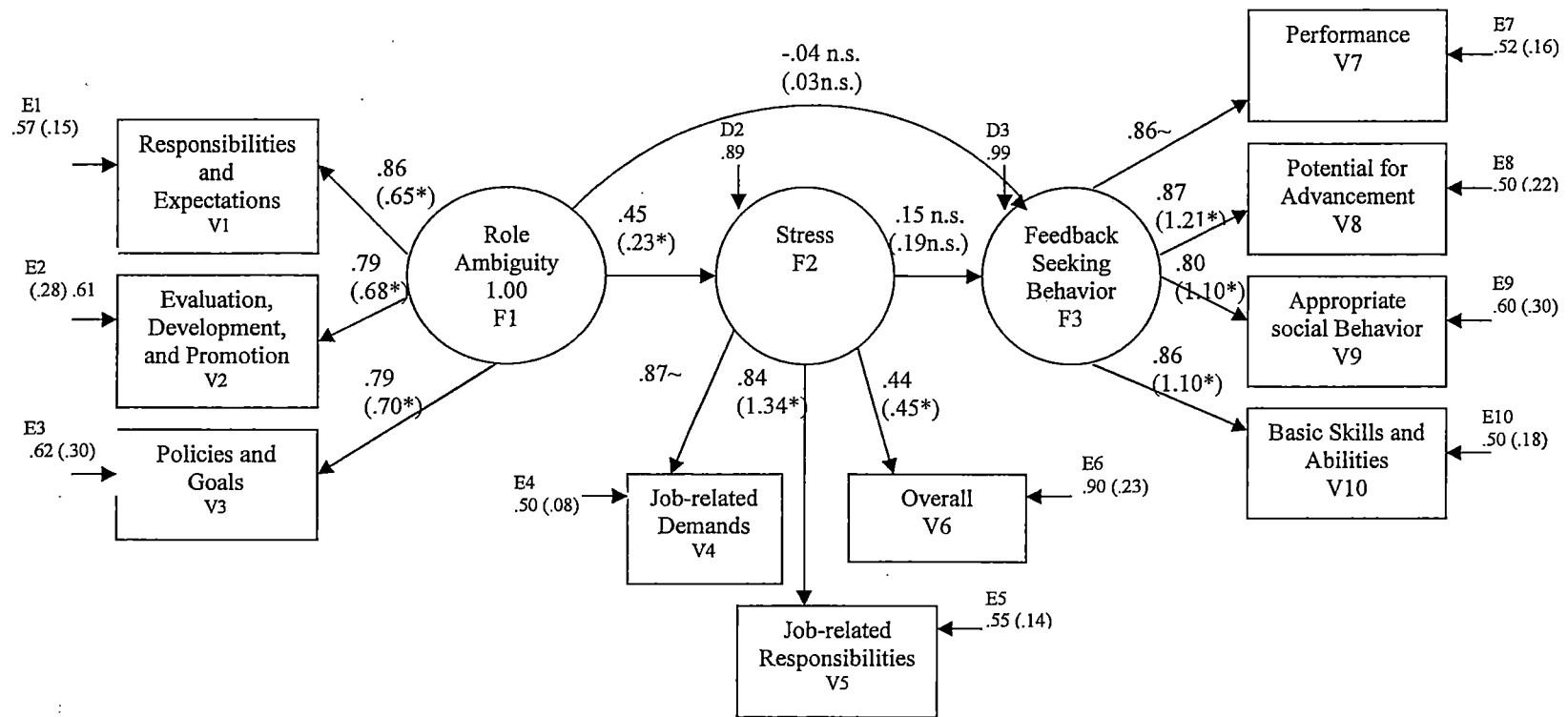
~ parameter variance was set to 1.00

Note: Significance was based on unstandardized coefficients
Unstandardized coefficients appear in parentheses

APPENDIX H

BASELINE MODEL FOR LOW TOLERANCE FOR AMBIGUITY

GROUP



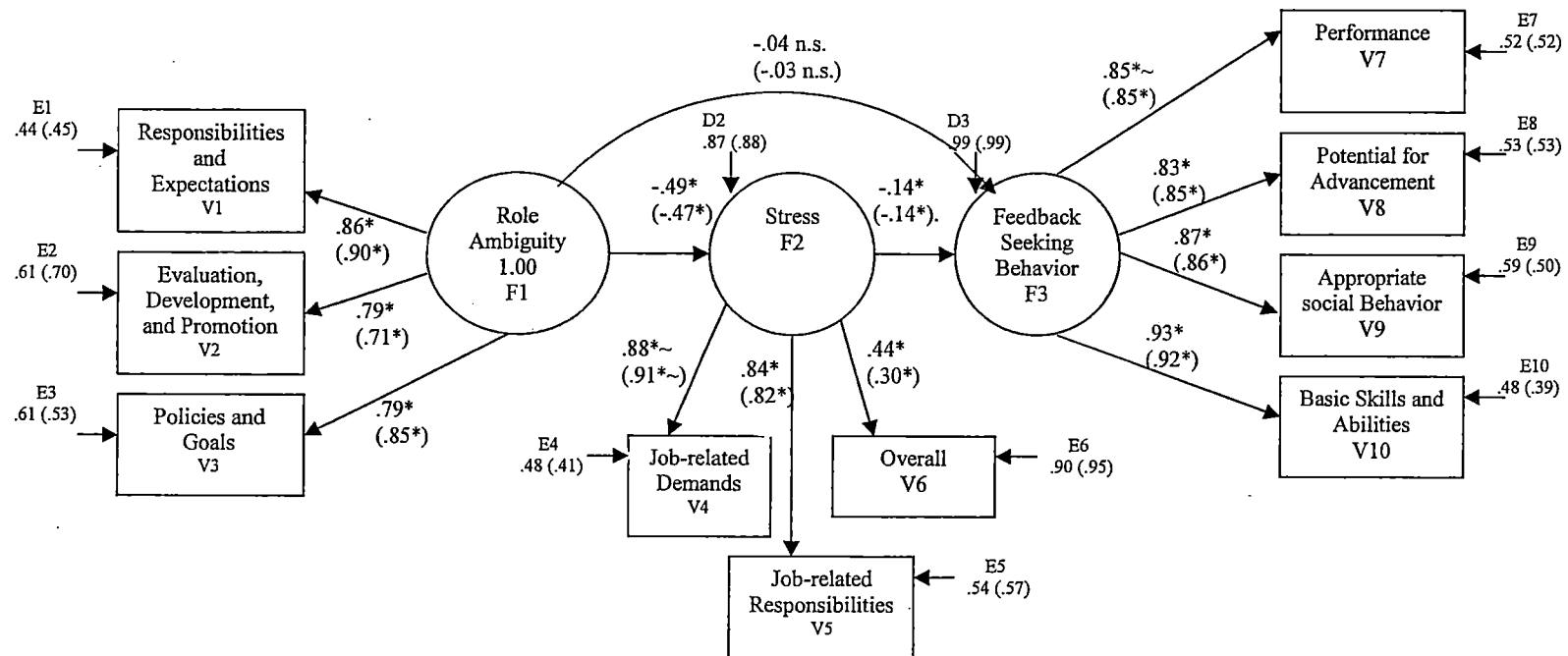
* $p < .05$

~ parameter variance was set to 1.00

Note: Significance was based on the unstandardized coefficients

Unstandardized coefficients appear in parentheses

APPENDIX I
FINAL MULTIPLE GROUPS MODEL



* $p < .05$

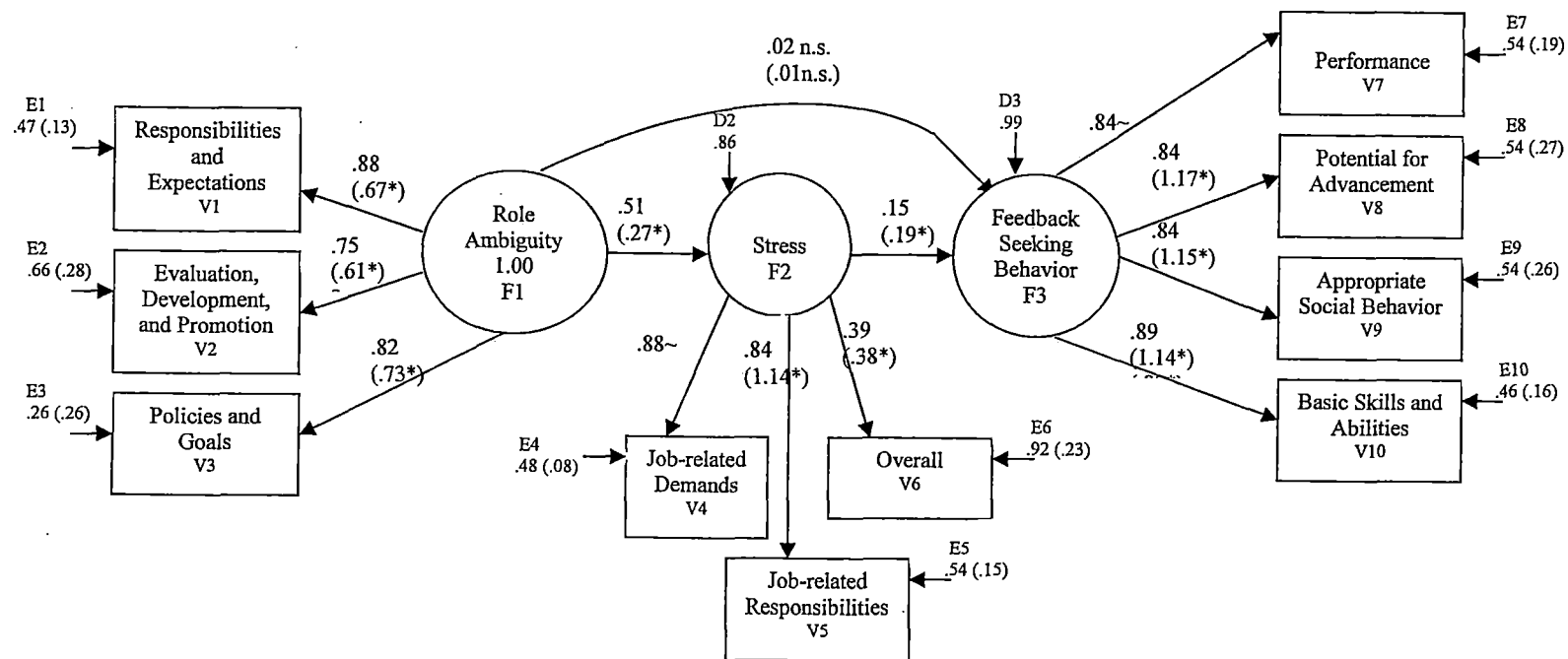
~ parameter variance was set to 1.00

Note: Standardized coefficients for high and low tolerance for ambiguity are reported; high tolerance for ambiguity in parentheses.

Significance tests were done on unstandardized coefficients.

APPENDIX J

FINAL MODEL FOR THE ENTIRE SAMPLE



* $p < .05$

~ parameter variance was set to 1.00

Note: Unstandardized coefficients reported in parentheses

APPENDIX K
CORRELATION COVARIANCE MATRIX FOR THE ENTIRE
SAMPLE

	1	2	3	4	5	6	7	8	9	10	11
1. Responsibilities and expectations	1.0										
2. Evaluation, development, and promotion	.66**	1.0									
3. Policies and goals	.72**	.61**	1.0								
4. Job-related demands	.37**	.31**	.33**	1.0							
5. Job-related responsibilities	.39*	.34**	.36**	.74**	1.0						
6. Overall stress	.26**	.26**	.28**	.34**	.28**	1.0					
7. Performance	.01	.05	.07	-.07	-.04	-.15**	1.0				
8. Potential for advancement	.01	.05	.05	-.14**	-.08	-.10*	.76**	1.0			
9. Appropriate social behavior	.02	.11*	.06	-.14**	-.11*	-.17**	.68**	.69**	1.0		
10. Basic skills and abilities	.01	.07	.08	-.10*	-.05	-.14**	.74**	.72**	.78**	1.0	
11. Overall tolerance for ambiguity	.14**	.14**	.07	.05	.08	-.02	-.01	-.02	.06	.05	1.0

** p < .01 (2-tailed)

* p < .05 (2-tailed)

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