

THE SATISFIED SCHOOL PSYCHOLOGIST: THE MODERATING IMPACT OF LOCUS  
OF CONTROL ON THE RELATIONSHIP BETWEEN SCHOOL CLIMATE AND JOB  
SATISFACTION

BY

SAMANTHA IOIA DELUZIO

A DISSERTATION  
SUBMITTED TO THE FACULTY OF

ALFRED UNIVERSITY

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS  
FOR THE DEGREE OF

DOCTOR OF PSYCHOLOGY

IN

SCHOOL PSYCHOLOGY

ALFRED, NEW YORK

THE SATISFIED SCHOOL PSYCHOLOGIST: THE MODERATING IMPACT OF LOCUS  
OF CONTROL ON THE RELATIONSHIP BETWEEN SCHOOL CLIMATE AND JOB  
SATISFACTION

BY

Samantha Ioia DeLuzio

HAMILTON COLLEGE, B.A. (2004)

ADELPHI UNIVERSITY, M.A. (2006)

ALFRED UNIVERSITY, M.A., C.A.S. (2008)

**APPROVED BY:** Mark Fugate, PhD  
Committee Chairperson

Edward Gaughan, PhD  
Committee Member

Arthur L. Greil, PhD  
Committee Member

Callen Fishman, PhD  
Committee Member

**APPROVED BY:** Mark Fugate, PhD  
Chairperson, Division of School Psychology

Nancy Evangelista, PhD  
Associate Provost and Director of Graduate Studies

Richard Stephens, PhD  
Provost & Vice President for Academic Affairs

## **Acknowledgements**

The road to achievement within this Doctoral Program is paved with the assistance and efforts of the many who worked diligently to assist me as I stumbled and caught my footing during the long, winding process. Without these individuals, this would never have been possible.

The faculty of Alfred University prepared me to take on the ambiguous, but rewarding, world of School Psychology. I am proud of the training I received and the hard work it required. I'd like to thank my committee members for challenging me during this long process. I can't express in words my thanks to Dr. Mark Fugate for chairing my dissertation committee. I would also like to thank Dr. Arthur Greil for being an essential member of my committee. Your guidance with statistics was invaluable, but it was your listening ear and insight that continue to be most deeply appreciated. A big "thank you" to Dr. Callen Fishman and Dr. Edward Gaughan, for joining in on the committee fun. To all 4 professors, your time and effort never went unnoticed or without the utmost appreciation.

This accomplishment would not have been a possibility without the unyielding love and support of my mom and dad. My mother, my first and greatest teacher in life, has listened to every moment of panic with a calm and steady demeanor. She has assisted me through every level of education and every life success. Thank you, mom, for being my moral compass and cheering crowd in every venture, great or small. My father, with his "reach for the stars" guidance, has always been my professional role model. I am so grateful for your advice and encouragement, Dad. Aiming high, refusing to listen to the naysayers, and achieving anything that has been started were part of the Ioia house rules. Having two parents who have attained the highest degrees, made master's degrees and doctoral degrees the norm. Everything I am today is

because of who my parents are, and the investment and sacrifices they made. I am exceptionally blessed.

I would also like to thank my brother, John. You have done more to shape who I am than you may realize. You have been my friend, foe, conspirator, and sounding board through life.

My husband, Matt, is another calm, steady, loving presence in my life, who deserves a tremendous heartfelt thanks. Throughout our relationship, the subject of my dissertation has maintained a distinct presence. You have been there to celebrate each success and weather each storm, showing superhuman patience during many academically driven meltdowns. You are selfless and reassuring. I am proud to have you as my best friend and partner in crime, forever. I cannot wait to see what our next adventure will hold!

Last, but certainly not least, thank you to all of my friends and family members who have always been there for me. You are the best people I know.

## Table of Contents

List of Tables.....	v
List of Figures.....	vii
List of Appendices.....	viii
Chapter 1: Introduction.....	1
Chapter 2: Review of the Literature.....	4
Job Satisfaction.....	4
School Climate.....	13
School Psychology.....	17
Personal Characteristics.....	26
Aims and Objectives.....	28
Research Questions.....	29
Chapter 3: Method.....	31
Participants.....	31
Procedure.....	32
Measures.....	34
Variable Definitions.....	38
Statistical Methodology.....	39
Chapter 4: Results.....	43
Restatement of Purpose.....	43
Statistical Analysis	
Description of the Sample.....	43
Description of Scales.....	45
Research Question 1.....	46
Research Question 2.....	47
Research Question 3.....	48
Research Question 4.....	49
Research Question 5.....	50
Research Question 6.....	52
Chapter 5: Discussion.....	54
Summary.....	54
Conclusions.....	55
Implications for Practice.....	57

Limitations.....	58
Recommendations for Further Study.....	59
References.....	62
Tables.....	74
Figures.....	93
Appendices.....	107

## List of Tables

Table 1: Demographic Characteristics of Sample.....	74
Table 2: U.S. Regions of States and Respondents.....	75
Table 3: Grades Worked With in Current Position.....	76
Table 4: Expectations and Desire to Leave Job/Profession.....	77
Table 5: Descriptive statistics for Minnesota Satisfaction Questionnaire- short form.....	78
Table 6: Descriptive statistics for School Climate Survey Subscales and Overall Scale.....	79
Table 7: Descriptive statistics for Rotter’s Internal-External Locus of Control Scale.....	80
Table 8: Relationships between select demographic variables and job satisfaction.....	81
Table 9: Relationships between select demographic variables and school climate.....	82
Table 10: Relationships between select demographic variables and locus of control scale.....	83
Table 11: Pearson correlation coefficients between MSQ scale and SCS subscales.....	84
Table 12: Simultaneous Regression Analysis Predicting Job Satisfaction from SCS Subscales..	85
Table 13: Stepwise Regression Analysis Predicting Job Satisfaction from SCS Subscales, in Test Sample.....	86
Table 14: Pearson Correlations between MSQ, SCS, and LOC scales.....	87
Table 15: Multiple Regression Analysis Predicting Job Satisfaction from SCS and LOC scales.....	88
Table 16: Hierarchical Regression Analysis Predicting Job Satisfaction from SCS and LOC scales, after Controlling for Years in Occupation.....	89
Table 17: Hierarchical Regression Analysis Predicting Job Satisfaction from SCS and LOC scales, and their interaction.....	90
Table 18: Conditional effect of SCS scale on MSQ scale, at three different values of LOC	

Scale.....91

Table 19: Hierarchical Regression Analysis Predicting Job Satisfaction from SCS and LOC

scales, and their interaction, after controlling for years in occupation.....92

## List of Figures

Figure 1: Distribution histogram of scores on MSQ-sf scale.....	93
Figure 2: Distribution histogram of scores on SCS scale.....	94
Figure 3: Distribution histogram of scores on I-E LOC scale.....	95
Figure 4: Scatterplot between MSQ scale scores and age in years.....	96
Figure 5: Scatterplot between MSQ scale scores and years in occupation.....	97
Figure 6: Bar chart showing mean MSQ scale scores according to level of career expectation...	98
Figure 7: Scatterplot between SCS scale scores and age in years.....	99
Figure 8: Scatterplot between SCS scale scores and years in occupation.....	100
Figure 9: Bar chart showing mean SCS scale scores according to level of career expectation met.....	101
Figure 10: Scatterplot between LOC scale scores and age in years.....	102
Figure 11: Scatterplot between LOC scale scores and years in occupation.....	103
Figure 12: Bar chart showing mean LOC scale scores according to level of career expectation met.....	104
Figure 13: Scatterplot matrix showing relationship between MSQ scale, SCS scale, and LOC scale.....	105
Figure 14: Scatterplot of SCS and MSQ scales, with size marker illustrating the LOC scale score.....	106

## **List of Appendices**

Appendix A: Final Survey Link.....	107
Appendix B: Demographic Questionnaire.....	108
Appendix C: Minnesota Satisfaction Questionnaire, Short Form.....	110
Appendix D: School Climate Survey, Staff Version Revised.....	111
Appendix E: Rotter’s Internal-External Locus of Control Scale.....	114
Appendix F: State Correspondence.....	118
Appendix G: Participant Correspondence.....	119
Appendix H: Descriptions of the 9 School Climate Survey Staff Version Subscales.....	120

## **Abstract**

This study examined the effect of locus of control on the relationship between school psychologists' perception of school climate and their overall level of job satisfaction. Public schools can be a difficult working environment. The climate in public schools has long been a topic of interest among researchers (Collie, Shapka & Perry, 2012), as has the resulting job dissatisfaction of teachers (Cohen et al., 2009; Skaalvik & Skaalvik, 2009). Unfortunately, there is a void in previous research to examine this relationship amongst school psychology professionals, who play an invaluable role in today's educational system. Personal characteristics, (i.e.- locus of control, age, degree, etc.), in combination with the perceived environment (i.e. school climate) have an impact on emotions (i.e. job satisfaction). In this study, participants' job satisfaction, perception of school climate and locus of control were assessed using the Minnesota Satisfaction Questionnaire, short form (MSQ-sf), the School Climate Survey, Staff Version Revised (SCS), and Rotter's Internal External Scale (I-E). The relationship between the resulting scores were examined and compared.

## Chapter 1: Introduction

Behavior is a function both of a person's characteristics and the nature of his or her environment (Sherman & Fazio, 1983). It has long been clear that performance on the job is greatly related to one's overall level of job satisfaction (Hoppock & Hoppock, 1934; Poffenberger, 1927; Riggle, Edmondson, & Hansen, 2009; Tandon & Tyagi, 2012; Wernimont, 1966). Holland (1996) argued that vocational satisfaction depends on the connection between one's "personality" and the atmosphere in which one works. In other words, who a person is innately drives the satisfaction derived from aspects of his or her job. Thus, person-job fit is of paramount importance for job satisfaction (Warr & Inceoglu, 2012).

School climate is a critical component for an effectively run school (Collie, Shapka, & Perry, 2012; Freiberg & Stein, 1999). While it has been concluded that the perceptions of school climate are important because they may have a positive or negative impact on the implementation of change in schools, on educators' motivation, productivity and well-being in general, and also on learners' motivation and achievement (Collie, Shapka & Perry, 2011), there have not been studies on the impact the school climate has on the job satisfaction of those professionals who work at the school, and for school psychologists in particular.

As the culture of American public schools continues to embrace an inclusive educational environment for all students (Carrington, 1999), school psychologists play an increasingly important role in the day-to-day operation of schools (Conoley & Gutkin, 1995). Accordingly, it is imperative that the professional population of school psychologists is effective on the job. It is well researched that satisfied professionals are effective professionals (Wang & Lee, 2009). This brings into focus the concept of locus of control, which refers to the extent to which individuals believe that they can control events that affect them. In the case of job satisfaction, the concept

of locus of control can be applied when considering how an employee reacts to or perceives the climate in which he/she works based on how much said employee believes that he/she can control events that effect them, in this case, the work environment (Furnham & Drakeley, 1993).

Although job satisfaction, in general, has been widely studied in the past, current job satisfaction research for school psychology professionals is extremely limited (VanVoorhis & Levinson, 2006), particularly research looking into the potential shared level of the trait of locus of control amongst school psychologists, where there have been no studies performed to date. Furthermore, while school climate, or the character of the school, has been gaining popularity as a topic of research (Cohen, McCabe, Michelli & Pickeral, 2009), a study pulling out the importance the impact school climate has on school psychologists professionally has not, to date, entered the growing body of literature.

In view of the limited literature and data, this study seeks to determine if one's locus of control (LOC) enables an individual to maintain personal satisfaction despite a negative school climate and/or if higher LOC is positively related to the perception of a positive school climate, in turn resulting in higher levels of job satisfaction among school psychologists. This present study contributes to the current body of literature by responding to the need for research that examines moderator effects of locus of control (LOC) on the relationship between school climate and the level of job satisfaction of school psychologists. It additionally serves to build upon the small body of research concerning the pool of individuals who make up the nation's school psychology work force. To those ends, this study was designed to answer the overarching question: What is the relationship between the job satisfaction of school psychologists and their perceived school climate, as moderated by the personal characteristic, locus of control?

The following review of the literature addresses the topics of job satisfaction, school climate, school psychologist characteristics and the connections between these topics.

## **Chapter 2: Review of the Literature**

### **Job Satisfaction**

The literary foundation of general job satisfaction studies is extensive and has evolved in a number of ways. The following is a review of how job satisfaction is defined and assessed; and how job satisfaction is impacted by internal factors (personal characteristics), and external factors (perceived school climate). Additionally, the effects of job satisfaction on the individual and the organization are explored.

### **Definition of Job Satisfaction**

The concept of job satisfaction has been widely defined. An early definition identifies job satisfaction as the feelings a worker has about his or her job or job experiences in relation to previous experiences, current expectations, or available alternatives (Brayfield & Roth, 1951). Locke (1976) defined job satisfaction as a positive emotional state that is derived from an individual's evaluation of his or her job experience, and the current contemporary definition, which has not changed significantly since Locke's definition 30 years prior, characterizes job satisfaction as the degree to which people like their jobs and how they feel about different aspects of their jobs (Spector, 1997). Overall, these definitions can be combined and consolidated into the succinct statement that job satisfaction can be simply defined as the level of contentment of an individual feels because of his or her job.

### **History of Job Satisfaction**

In the early 1920s, the needs of society as they pertained to the workforce focused primarily on the physical and mental strain of work. Research revealed that continuous mental work decreased production (Poffenberger, 1927). Further exploration of the effects of constant work revealed that a decrease in positive feelings did not consistently decrease production

(Poffenberger, 1928). It was also concluded that workers are usually able to determine the duration of rest periods needed in order to maintain their production rates (Shephard, 1928).

As the theories of Freud, Adler, and Jung became more prevalent, researchers began to apply these theories to the work force, and it was soon discovered that the need for human contact between management and the individual worker was essential for the psychological well-being of the worker (Hersey, 1932). Subsequently, researchers began to develop an interest in how people felt about their jobs relative to their lives in general. Interestingly, one study revealed that 66% of the 309 individuals surveyed were more satisfied with their job-related activities than their leisure activities (Hoppock & Hoppock, 1934). By the late 1930s researchers began to explore reasons for why people leave their jobs. They found that the amount of change in occupational level had little effect on job satisfaction; however, the direction of that change exerted a much stronger influence on an individual's degree of satisfaction (Super, 1939). Secondary reasons for job dissatisfaction included economic and managerial policies (Super, 1939). Overall, it was the nature of the job, personal characteristics of the worker, lack of education or skills, work conditions, lack of opportunity for promotion, monotony, insufficient salary, and long hours that were found to be significantly related to job dissatisfaction (Watson & Seidman, 1941).

As researchers brought greater insight into the variable of job satisfaction, they began to develop instruments to measure these concepts with greater range and efficiency. An attitude survey, later named the Employee Inventory (EI), was designed and used to obtain information from workers. In the measure's first use, the results showed that 11% of the Sears Roebuck industry's employees were dissatisfied with their jobs (Moore, 1941). Similar to the aforementioned Watson & Seidman study, the areas of dissatisfaction included the following:

lack of opportunity for advancement, lack of recognition, and the nature of the work itself (Moore, 1941). In an anti-union statement, Moore (1941) warned that “dissatisfied workers are the fuel for the fire of revolt” (p. 363) and should therefore be retrained for jobs that are more suitable to their abilities.

Over the years, researchers continued to revisit and expand on areas of study from previous years. One area of continued interest was the influence of intrinsic and extrinsic motivations on the job satisfaction of different segments of the working population. It was discovered that individuals at higher occupational levels placed more value on intrinsic job components such as opportunity for self-expression and on the value of their work, whereas individuals at lower occupational levels placed more value on extrinsic job components, such as pay and security. While there were no significant gender differences found, it is interesting to note that women placed more value on the people they worked with, while men placed more value on the use of their talent and skill (Centers & Bugental, 1966). Another study sought to measure the intrinsic and extrinsic factors in job satisfaction of 50 accountants and 82 engineers (Wernimont, 1966). Both groups endorsed more intrinsic than extrinsic factors of job satisfaction. The results revealed that the variables that account for job satisfaction include achievement, responsibility, and the nature of work. The variables that account for dissatisfaction include factors that are extrinsically linked, such as lack of advancement and recognition (Wernimont, 1966).

Studies investigating the relationship between gender and job satisfaction became increasingly prevalent after World War II. Women entered the workforce because of necessity during the war, and many remained in the workplace following the war. Gadel (1953) compared 23 to 65 year old women who were employed on a part-time basis with women under age 23 who

were employed on a full-time basis. The results revealed that women in the 23 to 65 year old range performed as satisfactorily as the younger women. They also had considerably higher job satisfaction and lower turnover rates.

Locke's (1969) "value-percept" model, following the school of cognitive behaviorism, was based on the concept that behavior can be guided by expectations. Locke (1976) asserted that when an employee values certain aspects or roles of his or her job, job satisfaction is influenced by how closely his or her expectations are met. The main idea of Locke's (1969) theory is that job satisfaction is shaped by the size of the discrepancy between what an individual wants in a job and what he or she has in a job. Additionally, an individual's level of job satisfaction is affected by a wide array of environmental, or external variables, and individual, or internal variables (Tandon & Tyagi, 2012). This idea of job satisfaction is based on the premise that job satisfaction results from the comparison between what the job provides and what the employee needs, wants, or desires from the job (Locke, 1969, 1976), or that the person and the environment fit well together. Locke (1969) stated that while overall job satisfaction is the sum of the elements of which the job is composed, each facet has individual importance and meaning.

In the 1960's, in an attempt to quantify job satisfaction, researchers at the University of Minnesota developed the Minnesota Satisfaction Questionnaire (MSQ), which has become one of the most popular and most commonly used, facet-based measures of job satisfaction (Dawis & Lofquist, 1984; Tandon & Tyagi, 2012). The MSQ works within Locke's model of job satisfaction in that it combines 20 dimensions of a job (Weiss et al., 1967). Wanous and Lawler (1972) reported that, after a meta-analysis reviewing operational definitions of job satisfaction, the validity of measuring job satisfaction through a survey instrument was sound, and that operational definitions used to develop survey instruments significantly overlapped one another.

Although specific facets may differ between each evaluation, overall job satisfaction is still the sum of these evaluations of elements of which the job is composed (Locke, 1969; Wanous & Lawler, 1972).

More recent research has progressed from examining the overall concept of job satisfaction, and has now begun to look at the impact that high or low satisfaction has on a personal level and on an organizational level. Studies also search to find ways to increase the level of satisfaction professional populations experience.

### **Job Satisfaction and Job Characteristics (External Factors)**

The facets of a job that are important to an individual, and the level to which the individual positively or negatively experiences each of those characteristics of the job, have a great impact on the satisfaction he or she derives from his or her work experience (Locke, 1976). Almost any job related factor can influence a person's level of job satisfaction or dissatisfaction; however, the major dimensions mentioned most often in the literature are pay, supervision, colleagues, the organizational climate and the work itself (Smith & Cranny, 1968; Spector, 1985; Tandon & Tyagi, 2012).

In the past, higher pay was identified as a factor that contributes to higher job satisfaction (Lucas, Babakus, & Ingram, 1990; Weaver, 1980); however, recent investigations suggest that pay level is only marginally related to satisfaction (Judge et al., 2010). The literature now leans toward an understanding that working individuals tend to be more concerned about fairness in salary rather than the actual amount (Spector, 1997). In general, individuals are dissatisfied with their jobs if they discover that people within the same job earn more money, and the more they are paid, the more satisfied they are with their salaries (Clark, Kristensen & Westergard-Nielsen,

2009). Nevertheless, satisfaction with one's salary does not equate to professional satisfaction, or the personal gratification one feels from being part of an occupation (Judge et al., 2010).

The development of cooperative work relationships, both supervisory and collegial, is an essential component for the building of a quality work environment (Dalal et al., 2009). Consequently, the quality of a relationship appears to generalize to the work climate. Moreover, employees prefer to work with supervisors who are considerate, supportive, and person centered in their approach rather than hostile and job centered (Weaver, 1980). In an illustrative study, teachers identified the leadership of the principal and relationships with fellow teachers as significant sources of job satisfaction, indicating that work relationships enhanced the overall positive workday experience (Chase, 1951).

The nature of the work itself, i.e. the opportunities for using skills and abilities and the extent to which an individual perceives him or herself to be a valued participant in his or her work organization, has great influence on satisfaction (Puvada & Gudivada, 2012; Smith & Cranny, 1968). Interestingly, despite individuals' apparent need to feel as though they are an important part of the team, perceived autonomy or independence, has also been listed as an aspect of a job that promotes job satisfaction (Spector, 1997). Puvada and Gudivada (2012) concluded that enhancement of both job performance and job satisfaction are both essential to maintain positive organizational climate, thus warranting the inclusion of climate in the investigation of satisfaction in the workplace.

The working environment, or the organizational climate, has been shown to predict job satisfaction (Schyns, VanVeldhoven, & Wood, 2009). Organizational climate researchers focus on the totality of the policies, practices, procedures, and the behaviors that get rewarded, supported, and expected throughout an organization, whereas researchers interested in job

satisfaction focus on the individual and his or her experiences within the organization (Patterson et al., 2005). Previous studies have concluded that workplaces can increase job satisfaction, commitment and retention of employees by influencing an organization's climate (Tsai & Huang, 2008).

### **Job Satisfaction and Personal Characteristics (Internal Factors)**

Meta-analyses of job satisfaction research state that how one interprets and responds to the external factors of work are influenced by internal factors; these internal factors (i.e., age, gender, education, personality traits) effect and enhance both performance and satisfaction (Riggle, Edmondson, & Hansen, 2009; Tandon & Tyagi, 2012).

It is of interest to further explore personal characteristics, such as age, race, gender, education, and personal experiences or locus of control, as an extension of personal influence. In other words, who a person is has the capacity to have an effect on an individual's behavior. Attracting the right type of person, with the right level of an important personal characteristic (i.e., higher or lower locus of control) may ensure a longer, more productive, career tenure (Alarcon, Eschleman, & Bowling, 2009). Locke (1969) described his position as one emphasizing person-situation interaction; both the person (values) and the environment (available outcomes) must be taken into account in predicting job satisfaction. He criticized those approaches that looked solely at the correlation between features of the environment and satisfaction, without taking individual differences in values into account.

The development and intensity of expectations, or cognitions regarding role and function, is impacted by an individual's personal characteristics. According to Locke (1961, p.316):

Job dissatisfaction is the unpleasurable emotional state resulting from the appraisal of one's job as frustrating or blocking the attainment of one's job values or as entailing

disvalues. Job satisfaction and dissatisfaction are a function of the perceived relationship between what one wants from one's job and what one perceives it as offering or entailing.

Personal characteristics, or intrinsic motives, influence one's motives, ideas, beliefs, emotions, problem solving capabilities, and adaptability (Pierce, Jussila, & Cummings, 2009). Theories of personality types contend that each individual has a natural preference that falls into one particular category, indicating how one is likely to deal with different situations that life presents, and in which environments we are most comfortable (Alarcon, Eschleman, & Bowling, 2009).

Carver and Scheier (2000) offer a contemporary definition for personality: "Personality is a dynamic organization inside the person consisting of psychophysical systems that create a person's characteristic patterns of behaviors, thoughts, and feelings" (p. 5). Put simply, personality is the unique combination of characteristics that explain or describe an individual. Rotter (1966) described personality in terms of internal and external locus of control. The Locus of Control is thought of as a means to measure generalized expectancies for internal versus external sources of reinforcement in response to a given action or activity. People with an internal LOC believe that their own actions determine the rewards that they obtain, while those with an external LOC believe that their own behavior doesn't matter much and that rewards in life are generally outside of their control.

Research into the impact of locus of control on job satisfaction has found that, at least for service based jobs, including schoolteachers (Bein, Anderson & Maes, 1990), school administrators (Richford & Fortune, 1984), hospital employees (Kasperson, 1982), and police officers (Lester, 1987), internal locus of control is positively correlated to job satisfaction, while external locus of control is negatively correlated with job satisfaction. The general belief that

personal actions lead to desired outcomes, or an internal locus, should be the foundation upon which confidence in work experiences (such as professional growth opportunity, salary, role, autonomy) can be developed.

Lawler and Porter (1967) argued that job performance would lead to job satisfaction through the anticipation of intrinsic and extrinsic rewards. Locke (1969) also viewed satisfaction as resulting from performance, but in his case satisfaction was viewed as a function of goal-directed behavior and value attainment. These “expectancy” theorists (Lawler & Porter, 1967; Locke, 1969) believe that job satisfaction is intrinsically motivated. In other words, desired outcomes drive a person to act in certain ways, and the achievement (or failure) of a desired outcome results in an individual’s level of satisfaction.

### **Effects of Job Satisfaction**

Over the past several decades, job satisfaction has been studied repeatedly, across many professional fields, including but not limited to nurses (Blegen, 1993), engineers (Riggle, Edmondson, & Hansen, 2009), police officers (Johnson, 2012), doctors (Williams et al., 2010), teachers (Skaalvik & Skaalvik, 2011) and other professionals (Furnham & Schaeffer, 2011). Job satisfaction has important organizational, personal, and social implications (Spector, 1985). Satisfaction in the workplace has been connected with many positive outcomes, including increased productivity, increased positive workplace climate, and retention of employees (Tandon & Tyagi, 2012). In a nutshell, job satisfaction has a collective positive impact on job performance (Judge, Thoresen, Bono, & Patton, 2001).

It comes as no surprise that organizations want productive employees. Interestingly, the current body of research states that while those who perform well professionally are generally satisfied; not all those who are satisfied professionally always perform well (Puvada & Gudivada,

2012). This is an interesting dichotomy, which suggests that performance leads to job satisfaction, yet job satisfaction does not necessarily lead to performance. In support of this finding, Spector (1997) found that the correlation between job performance and job satisfaction is unexpectedly low. However, in a subsequent qualitative and quantitative review of the relationship between job satisfaction and job performance, Judge et al. (2001) cautioned that the modest correlations reported by researchers were due to inconsistent data collection and interpretation. It is thus important to evaluate the correlation between satisfaction and performance in the context of other moderating variables, such as locus of control (Judge et al., 2001; Spector, 1997).

### **School Climate**

The following is a brief review of how school climate is defined, what it impacts, its relationship to job satisfaction, locus of control and the literature that connects it to the professional practice of school psychology.

School environments vary greatly. The feelings or attitudes that are elicited from a school's environment are referred to as school climate. The climate within a school organization impacts how well the school functions (Cohen, McCabe, Michelli & Pickeral, 2009). Hoy (1990) described school climate as the character of the school, or the relatively enduring quality of the school environment that is experienced by an individual, effects his or her behavior, and is based on his or her collective perceptions of others' behavior in schools. Similarly, Cohen et al. (2009) defined school climate as the "quality and character" of a school, that includes "norms, values, and expectations that support people feeling socially, emotionally, and physically safe" (p. 182). In today's intense educational atmosphere, attention to climate is even more important to ensure that morale stays high and the staff can be cost effective (Kuperminc et al., 1997).

## **Components of School Climate**

School climate is a powerful determinant of teacher and student outcome. For example, a positive school climate has been associated with less student behavioral and emotional problems (Kuperminc et al., 1997). Cohen, McCabe, Michelli, and Pickeral (2009) recognized that aspects of both a school's physical and social environment help shape school climate. In turn, school climate influences the experiences of the individuals within that system (Cohen et al., 2009). Congruently, researchers from the Yale Child Study Center and School Development Program (Emmons et al., 2002) theorize that a school is an environmental system in which behavior, attitude, and achievement levels of students and staff reflects a school's climate. The following nine variables are included as elements affecting a staff member's perception of overall school climate: achievement motivation, collaborative decision making, equity and fairness, leadership, order and discipline, school building, school/parent/community relations, staff dedication to student learning, and staff expectations (Emmons et al., 2002). Please refer to Appendix H for the authors' operational definitions and descriptions for each of these variables.

School climate can play a significant role in providing a healthy and positive school atmosphere. Freiberg (1998) notes: "the interaction of various school and classroom climate factors can create a fabric of support that enables all members of the school community to teach and learn at optimum levels" (p. 22). It has been found that a positive school climate can yield positive educational and psychological outcomes for students and school personnel alike; similarly, a negative climate can prevent the highest level of learning (Cohen et al., 2009; Freiberg, 1998; Kuperminc et al., 1997; Pepper & Thomas, 2001).

The ideal educational environment is one in which both students and teachers feel comfortable, valued, confident and safe (Beach & Lindahl, 2004). This environment encourages

school members to form positive emotional connections with one another and a positive attitude toward school that, in turn, facilitates students' motivation to learn and pursue personal academic success (Pepper & Thomas, 2001). Teachers' perceptions of school climate are found to be an important influence on their sense of stress (Skaalvik, Skaalvik, 2009), feelings of professional efficacy (Hoy & Woolfolk, 1993), and job satisfaction (Taylor & Tashakkori, 1995).

Organizational climate research indicates that a positive climate results when members feel they are valued as individuals and that they are contributing to the success of the organization (Patterson et al., 2005).

### **School Climate and Job Satisfaction**

Understanding how perceptions of school climate influence job satisfaction for staff is not only important for school professionals, but also for students, who are inevitably impacted by their teachers' work experiences (Skaalvik & Skaalvik, 2009; 2011). Regarding the roles of teachers and administrators, Taylor and Tashakkori (1995) found that a positive school climate is associated with increased job satisfaction for school personnel. Teachers experience greater job satisfaction in schools with more professional autonomy and better interpersonal relations (Anderson, 1982). Bulack & Malone (1994) found that the quality of work relationships, or the level of openness, trust, communication and support shared by teachers was closely related to a school's ability to improve. School climate makes a difference in improving teachers' learning opportunities for professional development, job satisfaction, and performance (Bulach & Malone, 1994). To put it simply, as the culture or environment of the school becomes more positive, colleagues are more apt to share ideas and professional knowledge with one another, resulting in individuals who are happier to come to work, are thus more likely to continue working to the best of their abilities.

## **School Climate and Locus of Control**

It is important to note that the climate of a school is not necessarily experienced in the same way by all of its members. Rather, there is variability in individual perceptions of a school's climate, and researchers propose that it is this subjective perception of the environment that influences individual student and staff outcomes (Cohen, McCabe, Michelli & Pickeral, 2009). Moreover, individual characteristics may impact these perceptions so that individuals who have an internal locus of control may perceive their school climate more positively than those who have an external locus of control (Taylor & Tashakkori, 1995). Basak and Ghosh (2011) determined that teacher job satisfaction could be significantly predicted by locus of control and the overall personal perception of the school climate. This study highlighted the important influence of school climate, called "school environment", and locus of control on job satisfaction; a relationship that had not been examined from the teaching populations' perspective until said study (and a study that remains undone with the school psychologist population).

### **What does School Psychology say about school climate?**

A study authored by Manz, Mautone, and Martin (2009) was the first and only study to examine the interrelationships between school climate, administrative support, professional efficacy, and aspects of school psychologists' employment and training in relation to family collaboration. In this study, school climate was defined as the extent to which school psychologists felt that principals and colleagues recognized their competence and supported their efforts, in addition to providing resources and assistance for collaborating with families. Insufficient collaboration time and training opportunity was associated with lower perceptions of school climate. The length and level (part time or full time employment) of experience was not

found to correlate with perceptions of school climate. At this time, the results and subject matter of this research have not been replicated (Manz, Mautone, & Martin, 2009).

### **School Psychology, the Profession**

School psychology is a relatively young profession. The origins of school-based psychological services at the end of the nineteenth century were related to the circumstances and conditions at that time (Reynolds & Gutkin, 1999). These “circumstances” dealt with the changing status of children in America, a focus on developmental stages and child study, and the need for formal and compulsory schooling (Reynolds & Gutkin, 1999). Originally, Lightner Witmer (often considered the “father of school psychology”) intended the psychological expert present in an academic setting to be a teacher who was specially trained to deal with school-related problems. School psychology practitioners at the inauguration of the field were trained as educators and not necessarily psychological clinicians (Reynolds & Gutkin, 1999). Today, the discipline of school psychology has matured into an amalgamation of the fields of education, experimental, and clinical psychology. School psychologist preparation and training programs now incorporate educator preparation along with psychologist preparation (Fagan & Wise, 2000; 2007).

Nationally, there are over 30,000 employed school psychologists, with the most current approximation of practitioners to schoolchildren at 1:2,000 (Fagan & Wise, 2007). In 2000 Fagan and Wise estimated that there are approximately 25,000 school psychologists in the United States and about 21,000 are members of the National Association of School Psychologists (Fagan & Wise, 2000). An estimated 25% were of the doctoral level with degrees in Philosophy (PhD), Education (Ed.D. or D.Ed.), or Psychology (PsyD). These numbers highlight distinct growth when compared to Fagan’s previous account of 16,000 U.S. school psychologists, of whom

approximately two-thirds held doctoral degrees, only 19 years earlier (Fagan, 1981). Studies have not been done that show the numbers of trained school psychologists working in alternative or nontraditional settings, although the wide held impression is that the large majority of practicing school psychologists are employed in the school settings (Fagan & Wise, 2007).

### **Responsibilities and Skills**

Despite the relative youth of the profession, the school psychologist of the past is not the same as the school psychologist of today. Theory, laws, expectations, roles, and functions are not the same. Additionally, the educational system's framework has changed over the years and with it the expected functions of education professionals (Kozleski & Huber, 2010). A school psychologist is under the pressure of changing laws, ethics, policies, and regulations that govern schools, the profession, and the community (Ikeda, 2012; Reschly & Connolly, 1990; Reschly & Ysseldyke, 2002; Zirkel & Thomas, 2011). Nevertheless, the goal of school psychology has continued to be to promote a learning environment that focuses on the needs of the children. A school psychologist must strive to be an advocate for the best interest of the child and the family within the framework of the evolving educational world. This presents the professional in the field with the need to be constantly adaptive and plastic in their roles within the education system in order to meet the ever-changing needs of the schools they serve (Fagan & Wise, 2007). The greater challenge is for the discipline itself to make widespread efforts to change the professional role to meet the progressing needs of the educational system its' members are a part of (Bradley-Johnson & Dean, 2000; Reschly & Ysseldyke, 2002; Zirkel & Thomas, 2011).

Acknowledging the broad roles and functions of a school psychologist is important, as those roles and functions are a contributing factor in the attraction of individuals to the profession of school psychology. The conventional task of a school psychologist working in

educational settings revolves around the assessment of individual children (Fagan, 1981; Fagan & Wise, 2007). As defined by Cohen, Swerdlik, and Phillips (1996), psychological assessment can be seen as “the gathering and integration of psychology-related data for the purpose of making psychological evaluations, accomplished through the use of tools such as tests, interviews, case studies, behavioral observations, and specially designed apparatuses and measurement procedures” (p. 6). However, some have said that the practice of school psychology has moved from a medical model of “test-diagnose-label-place” to a model focused on prevention and positive change for all children (Fagan & Wise, 2007; Kozleski & Huber, 2010; Reschly & Ysseldyke, 2002).

In addition to the role of evaluator, school psychologists are responsible for planning and implementing intervention strategies (Reschly & Ysseldyke, 2002). The intervention aspect includes working with others to develop helpful techniques that can assist the child to succeed in the least restrictive educational environment (Fagan & Wise, 2007). Along these lines, school psychologists incorporate a consultative approach into the professional role assumed in educational settings. Fagan and Wise (2000) suggested that while the assessment role allows school psychologists “to determine the nature of services needed by a student, consultation strengthens the chances that the appropriate services will be delivered” (p. 139). Recognizing that the broad roles and functions of a school psychologist include assessment, planning, intervention implementation, and consultation is important in the exploration of additional factors that influence these tasks on both an individual and professional level.

Each individual comes to the profession of school psychology with a base of personal characteristics, life experiences, and training. Often times, an individual may have had a sibling who required the service of a school psychologist, or have experienced some other personal

exposure to the profession. Regardless of the inciting event, it was found that for many in the profession, there was likely a personal reason for the initial attraction to a school psychology graduate training program (Bradley-Johnson & Dean, 2000; Fagan, 1981; Fagan & Wise, 2007; Reschley, 2000). External factors (i.e.- role, laws, community, demographics, coworkers), as well as professional and personal circumstances serve to influence one's selection of, and performance within, a career as a school psychologist (Centers & Bugental, 1966; Wise, 1985).

### **Challenges of the Profession: Working Within a Challenging Environment**

How one handles or reacts to the external factors of the profession is internally driven. Two individuals may not experience the same thing in the same way. Accordingly, after recognizing what experiences attracted an individual toward the profession, it is then important to recognize the personal factors that they bring to the job. Personal factors are going to influence one's career selection, but they will also influence how one performs within that career (Furnham & Shaeffer, 2011; Heller, Ferris, Brown, & Watson, 2009; Locke, 1969; 1976). Fagan and Wise (2000) explained that "variables such as personality characteristics, age, gender, race, socioeconomic status, the type of community you were raised in, and the type of schooling you received, may influence your professional role" (p.109). In other words, each person is able to bring his or her own unique combination of traits, experiences and relationships to a career field and one's performance and contentment (Furnham & Shaeffer, 2011).

School psychologists cannot ignore the systematic forces that shape the profession (Bradley & Dean, 2000; Poncy et al., 2011; Reschly & Ysseldyke, 2002; Warr & Inceoglu, 2012; Wise, 1985; Zirkel & Thomas, 2011). It is the legislation and policy mandates that can influence the kinds of services they provide to students. School psychologists are often mandated by policy or by law to use particular evaluation procedures that go along with the traditional "gate-keeper"

role (Poncy, McCallum & Skinner, 2011), and as a result, the professionals in the field often do not have a part in the creation of the structure of school psychology services they provide. This can make it difficult for school psychologists to influence school administrators or state legislators to change policies (Sheridan & Gutkin, 2000).

Provisions for academic support have been arranged through federal law (Spring, 2006). These federal laws provide protection for students with disabilities with against discrimination and with affirmative rights to accommodations and modifications that are necessary for them to receive an appropriate education. The most important federal laws in this area are the Individuals with Disabilities Education Act (IDEA, 2006), Section 504 of the Rehabilitation Act, and the Americans with Disabilities Act (ADA, 2008). The IDEA provides that all students with disabilities (birth to age twenty-one) have a right to a free and appropriate education (FAPE) in the least restrictive environment (LRE) appropriate to their needs (IDEA, 2006). After a student's disability is identified, school personnel and parents must meet together to design an individual education plan (IEP) for the student. The IEP sets forth the requirements for the child's education, such as maximum class size, student-teacher ratio, and related services such as speech therapy, counseling, and occupational and/or physical therapy. Section 504 prohibits discrimination on the basis of a disability by any institution that receives federal funds (including schools; Sect. 504, 2006). The ADA (2008), building on Section 504 (2006), provides that all public institutions (and some private) may not discriminate on the basis of disability (Zirkel, 2009; 2010). Under both Section 504 (2006) and the ADA (2008), schools must make reasonable accommodations for students and employees with disabilities. The definitions of "disability" in the three aforementioned laws are distinct. Some individuals may be classified as having a disability for the purpose of Section 504 or the ADA and not under IDEA (Spring,

2006; Zirkel, 2010; 2011). Under these laws, students with disabilities have a legally enforceable right to appropriate services. A school psychologist plays a large role in the determination of a disability, the services necessary to level the educational playing field, and which law the provision of those services will fall under (Zirkel, 2010).

It is important to note that each state interprets the federal laws with a different perspective, and that each school system, within each state, implements the laws according to their own interpretations of state or federal guidelines (Jones & Toland, 2010). The law itself remains the same, but the way in which each system enacts each law will vary. This local interpretation of federal and state mandates influences the practice of a school psychologist on a daily basis (Decker & Hartshorne, 2010). It is plausible for a student to be found eligible for special education services in one district, then move into another school system and no longer be considered eligible for services (Zirkel, 2011). School psychologists outline and interpret services to be provided. Professionally, they are concerned with protecting the rights of the student; yet, they work for the school system. This dichotomy may explain the difficulty of disability determination in a nationally ambiguous educational arrangement (Wise, 1985). This ambiguous nature of the school as a workplace requires that a school psychologist have personal characteristics that allow him or her to effectively cope with and comfortably handle inconsistencies and uncertainties inherent in the system (Huebner & Mills, 1998; Larson & Ketelaar, 1991).

While school psychologists have been amongst the trailblazers in school climate research to benefit student academic and emotional well being, a survey of currently published literature does not produce a single study surveying the relationship between school climate and the professional satisfaction of school psychologists. The impact of school climate on the

professional satisfaction of teachers has been studied extensively in the past decade (Collie, Shapka, & Perry, 2012; Hoy & Woolfold, 1993; Johnson, Stevens, & Zvock, 2007; Skaalvik & Skaalvik, 2009). Findings indicate that teacher job satisfaction is supported by a positively perceived school climate (Basak & Ghosh, 2011; Collie, Shapka, & Perry, 2012; Hoy & Woolfold, 1993; Pearson & Moomow, 2005). Although the roles of a teacher and the roles of a school psychologist within a public school are quite different, it is the most closely related profession considered or reviewed with the use of school climate and job satisfaction measurements. Both teachers and school psychologists have the ultimate professional goal of improving students' outcomes. Student learning, achievement, and well-being are supported by positive school climates and higher job satisfaction of school staff (Cohen et al., 2009).

### **School Psychologist Job Satisfaction**

Studies in the past have explored school psychologist job satisfaction only to discover that, for the most part; survey respondents were satisfied with their career path (VanVoorhis & Levinson, 2006). Demographics have been used to justify satisfaction, but there is a hole in the research in looking at deeper, defining personal characteristics of the career's professionals. A meta-analysis of eight studies investigating job satisfaction among school psychologists did not demonstrate consistent trends regarding relationships between demographic variables, such as age, gender, or location of employment (VanVoorhis & Levinson, 2006). Additional research and alternative variables should be considered that move beyond the typical "demographic" variables.

Additionally, utilizing solely demographics to study the pool of school psychologists may be flawed, due to the lack of diversity within the profession. The applied subfield of school psychology is sighted to have a particularly high percentage of women, with three quarters of the

profession represented by women (National Science Foundation, 2005). As a profession, school psychology in the United States is largely female and largely Caucasian, and whose practitioners have more than ten years of experience, are typically married, and have children (Fagan & Wise, 2007). According to Reschley (2000), approximately 80% of the students in graduate level school psychology programs are female.

A practitioner's intent to stay in his or her current position and profession is a significant predictor of future turnover (Furnham & Schaeffer, 2011; VanWoorhis & Levinson, 2006; Warr & Inceoglu, 2012). While previous study results indicate overall high numbers of satisfied professionals, they also indicate that over 30% of the respondents planned to leave their positions (Brown, 1992). The rate of school psychologists leaving their jobs within 1 year of employment (31.8%) was similar to the percentage of school psychologists reporting dissatisfaction (35.8%) with their current jobs (Brown, 1992). In other words, nearly one-third of the respondents planned to leave their chosen profession as a school psychologist.

Age and community setting (urban vs. rural) have been targeted in previous research regarding school psychologist satisfaction and attrition. For example, literature reveals that job satisfaction actually increases with age (Maslach, Schaufeli & Leiter, 2001). School psychologists that are further along in their career are hypothesized to be less exhausted by or simply resigned to the role they are assigned (Brown, 1992); however, follow-up studies have not been conducted to test hypothesized moderating variables between satisfaction and age. Age is often tied to years on the job. That is to say, it is more likely that older individuals have been working for longer than younger individuals (with the exception of people who have entered a profession later in life). Therefore, job satisfaction may increase with years on the job too.

A study that sought to operationally define “early career” status across a range of disciplines indicated that an early career professional is an individual currently within their first five years of academic or other field-related employment allowing uninterrupted, stable professional development following completion of their postgraduate training (Bazeley, 2003). This definition fits nicely for the individuals who have entered the field of school psychology, as there is a year of internship required after the completion of graduate level courses. After a full year of internship experience, an individual is judged as equipped to enter into the practice and delivery of school psychology services. Assuming stability and continuity of employment, five years is believed to be sufficient to allow development of a more mature professional who has settled into the career, thus no longer fit to carry early career status (Bazeley, 2003). Bazeley’s (2003) definition does not discriminate on age, and allows others to utilize it across different tracts in different disciplines (i.e.- the specialist versus the doctoral level school psychologist).

The studies concerning urban versus rural setting generally indicate that location of practice is not significantly related to job satisfaction (Reschley & Connolly, 1990; Huebner & Huberty, 1984). The results suggest that the differences between school psychologists across settings (urban, suburban and rural) tend to be minimal, and the expectations, role, and practice of school psychology do not deviate greatly by location. According to the respondents of a national survey of school psychologists (Brown, 1992) the primary reasons for leaving their current employment included lack of professional growth, salary, role description, lack of autonomy, and personal reasons. Moreover, the school psychologists’ intent to leave their current employment was not significantly related to previous experience, administrative unit assignment, degree level, or setting (Brown, 1992). The trait of locus of control in relation to

how an individual experiences his/her job through the factors of professional growth, salary, role description, and autonomy is marginally outlined in the body of trait to job satisfaction research.

### **Personal Characteristics**

In the field of school psychology, Fagan and Wise (2007) suggest that outgoing, assertive and gregarious individuals may be more apt to enjoy consultation, staff development, and public speaking activities. On the other hand, those who are considered, “warm, friendly, and non-judgmental may be more sought after by teachers for advice about classroom management, crisis intervention, or other work-related problems” (p. 108). Certainly there are personal characteristics that are more advantageous for a school psychology student or professional to possess that encourage success within that career. Therefore, not only will personal characteristics likely guide an individual in the selection of a career and determine what is most suitable, but also they will in some measure determine both how one performs within that career, and also how day-to-day responsibilities or difficulties are weathered. Furthermore, these characteristics will play a role in the development of an individual’s expectations and how he or she reacts when his or her role is different than anticipated or desired.

A research survey conducted by Huebner and Mills (1998) suggests that a great number of new school psychologists enter the profession with the intention of immediately using their new proficiencies to the fullest extent. Many, unfortunately, come to realize that large number of caseloads and responsibilities can tax both their time and ability to cope (Huebner & Mills, 1998; Wise, 1985). These new practitioners also may find their skills limited by administrative policies, local mandates, and neither the money nor the personnel to implement their new ideas (Huebner & Mills, 1998). This is not to say that a school psychologist must have low professional expectations to feel satisfied by the professional role he or she fills. An individual

may simply need a subset of distinctive personal characteristics to work within the demanding world of school psychology. Huebner and Mills (1998) acknowledge that research investigating job satisfaction and its relation to the personal characteristics of school psychologists is limited, a fact that has remained to the present.

The traditional role of the school psychologist often leaves strategies and classroom interventions to teachers; although, for some time, school psychologists have recognized that, due to their training and expertise, they can be more effective in meeting students' needs and solving problems in schools (Bradley-Johnson & Dean, 2000). This is indicative of a group of professionals who would like to do more, but do not necessarily have the authority to do so. Rotter's internal-external locus of control measure indicates that the type of person who believes outcomes are shaped by his or her own actions rather than luck, actively pursues on his or her own to take on an influential nature professionally, and thus tends to be better informed about his or her chosen occupation (Rotter, 1966). Organ & Greene (1974) surmised that the relationship between "role ambiguity", a term the authors used to describe a professional's uncertainty of his or her role obligation or conflicting role view between the individual and the organization, and job satisfaction is merely symptomatic of a more basic relationship between locus of control and satisfaction. Thus, locus of control may be an important variable to study in school psychology professionals.

Many differences between those with an internal locus of control ("internals") and those with an external locus of control ("externals") are noteworthy in explaining aspects of behavior in an organizational setting, such as a school. Internals control their own behavior better, are more active politically and socially, and seek information about their situations more actively than do externals (Carver & Scheier, 2000). Compared to externals, internals are more likely to

try to influence or persuade others, are less likely to be influenced by others, and are often more achievement oriented. Compared to internals, externals appear to prefer a more structured, directive style of supervision (Rotter, 1966). Studies have shown that jobs permitting a high level of autonomy enable individuals to satisfy high order needs such as achievement and responsibility (Williams, Williams, & Ryer, 1990). A school psychologist's job is non-routine by nature and is characterized by autonomy, individual responsibility, task variety, and minimal direct supervision (Williams et al., 1990). Consequently, the nature of the school psychologist's job would appear to preferentially select individuals with internal loci as opposed to external. It is also possible that the perception of school climate are impacted by an individual's locus of control, although, at the moment there is no research to support this idea.

### **Aims and Objectives**

In the past, school psychologist job satisfaction research has simply made assumptions about the pertinent facets of the school climate, or ignored climate altogether; instead opting to focus on demographic factors (Huebner, 1993; VanVoorhis & Levinson, 2006). Furthermore, the personality characteristic locus of control, which has been found highly related to job satisfaction in other fields of work (Basak & Ghosh, 2011; Judge & Bono, 2001), has also been neglected in past research on the profession of school psychology. Keeping these two gaps in mind, this study aims to show that not only is there a relationship between school climate and job satisfaction for school psychologists, but that this relationship is moderated by the internal trait of locus of control.

Individuals who report overall dissatisfaction with their jobs have a higher probability of intending to quit than those reporting to be satisfied (Judge et al., 2001; Shields & Ward, 2001; Stempien & Loeb, 2002). Professional dissatisfaction could be a serious problem for school

psychologists, who report high turnover rates (Connolly & Reschly, 1990). To date, there have been few studies on the differences between school psychologists who report high levels of satisfaction from those who report low levels of job satisfaction (VanVoorhis & Levinson, 2006) and not a single published study to factor in an established, psychometrically sound measure of school climate. To ensure the endurance of the profession, those entering the field must stay in the field. Targeting a set of individuals with characteristics, namely locus of control, that make them hardier to the demanding, ambiguous professional atmosphere of a public school may support the attraction, retention, and engagement of individuals best fit for long-lasting careers in school psychology.

**Research Questions.** The purpose of this study was to examine the effect of locus of control on the relationship between school psychologists' perception of school climate and their overall level of job satisfaction. The following research questions (RQs) were formulated to guide this study.

**RQ1:** In a sample of practicing school psychologists:

- (a) What is the amount of job satisfaction with respect to the demographic variables: gender, age, degree level, location type, years working in profession, and career expectations met or unmet; and,
- (b) What are the relationships between job satisfaction and the aforementioned demographic variables?

**RQ2:** In a sample of practicing school psychologists:

- (a) What is the amount of perceived overall school climate with respect to the demographic variables: gender, age, degree level, location type, years working in profession, and career expectations met or unmet; and,

(b) What are the relationships between perceived overall school climate and the aforementioned demographic variables?

**RQ3:** In a sample of practicing school psychologists:

(a) What is the amount of internal locus of control with respect to the demographic variables: gender, age, degree level, location type, years working in profession, and career expectations met or unmet; and,

(b) What are the relationships between locus of control and the aforementioned demographic variables?

**RQ4:** What elements of school climate are predictive of job satisfaction?

**RQ5:** Do school climate and locus of control predict job satisfaction?

**RQ6:** Does locus of control moderate the effect that overall perceived school climate has on job satisfaction?

### **Chapter 3: Method**

This section will discuss the methodology of the current study. More specifically, it addresses the topics of selecting participants, procedures for data collection, instrumentation used as measures, the operational definitions for the variables of the study, as well as the statistical methodology used to evaluate the research questions and analyze the data.

#### **Participants**

The population for this study consisted of school psychologists enrolled in the New York, New Jersey, North Dakota, Delaware, Kentucky, California and Maryland state school psychologist associations. School psychologists were forwarded an emailed link to the questionnaire and a short cover note by their state association's president or web-site master. The questionnaires were solely administered in an online survey format. Out of 182 participants who signed consent, a total of 155 participants completed the survey in its entirety. The other 27 surveys were discontinued after providing consent, but before continuing on to the true survey questions. Due to the nature of how the survey was delivered (by a 3<sup>rd</sup> party and not this researcher), the response rate cannot be derived. The state associations would not provide any information about the size or demographics of the membership roster that the survey was forwarded to via email.

There were very few missing data points amongst the survey items for these 155 cases. There were no instances of missing data for the demographic items, the items comprising the Minnesota Satisfaction Questionnaire (MSQ), or the Locus of Control (LOC) scale. Four cases had one missing item each on the items comprising the School Climate Survey (SCS). SCS subscale scores containing those items were not computed for the respondents with missing data. Similarly, the SCS overall score was not computed for these four cases.

## **Procedure**

**Data Collection.** The nature of the methodology utilized in this research required the approval of the Human Subjects Research Committee (HSRC) of Alfred University, as human subjects were used in the investigation.

Upon HSRC approval, the sampling procedure for this study employed a self-administered survey instrument provided to potential respondents through the utilization of an online survey (on surveymonkey.com). Participants were pursued with the cooperation of school psychologist state association consent. All 51 (the 50 states and the District of Columbia) associations were contacted regarding member-sampling procedures. See Appendix F for email. Response was received from the states of Arizona, California, Colorado, Connecticut, Delaware, Florida, Illinois, Kentucky, Maine, Michigan, Nebraska, Nevada, New Hampshire, New Jersey, New York, North Dakota, Oklahoma, Pennsylvania, South Carolina, Texas, Virginia and Wisconsin. Arizona, Michigan, Texas, and Wisconsin indicated that, due to the members' right to privacy, the association created a policy to deny all requests to participate in research projects by graduate students, publishing companies, and any other third party.

An email and posting on the state associations' websites was used to solicit participation. To increase the number of potential participants, a link was placed on the Facebook membership page of state associations who approved. See Appendix G for email. An incentive of entry into a drawing for a \$100.00 Amazon.com gift certificate was included to entice participation.

All survey respondents were informed that their responses will remain confidential and be used without personal identification. When obtaining informed consent, the participants were informed about (1) the purpose of the research, duration and procedures; (2) their right to decline to participate and to withdraw from the research once participation has begun; (3) reasonably

foreseeable factors that may be expected to influence their willingness to participate such as potential risks, discomfort, or adverse effect; (4) any prospective research benefits; (5) limits of confidentiality; (6) incentives for participation and (7) whom to contact for questions about the research and research participants' rights. The questionnaire, including demographics, the Minnesota Satisfaction Questionnaire- short form (MSQ-sf) found in Appendix C , the School Climate Survey- Staff Version Revised found in Appendix D, and Rotter's Internal External Locus of Control (I-E) Scale found in Appendix E, should have been able to be completed in approximately 20 minutes. When answers were submitted electronically, data from the questionnaires was entered into a password-protected database and analyzed.

**Nonresponse.** A concern for researchers conducting surveys is the probability of a low response rate. Nevertheless, nonresponse can be reduced through the implementation of particular steps taken prior to distribution of survey materials (or in this case the link to the survey), such as careful choice of measures, length and design, as well as use of more advantageous distribution steps (Dillman, 2000). These steps include: conveyance a small gift, thanking participants for their assistance and support, repeated communications, and the emphasis of the survey's usefulness and importance of the response from each person in the sample (Dillman, 2000). All of these steps were addressed in the delivery of the request for participants in the message to the state association president or webmaster, the cover message that was included from the state association to the perspective participants, and in the beginning and ending screens of the web survey. Upon survey completion, participants were eligible to win a \$100 gift certificate to Amazon.com. Everyone (state association representatives and participants) was thanked repeatedly, messages were re-sent after a two-week waiting period, and the importance of the study for school psychology practitioners was emphasized (See

Appendixes for communication to participants). The online survey was open to interested participants for one month, from December 23, 2012 to January 23, 2013.

## **Measures**

**Minnesota Satisfaction Questionnaire- short form (MSQ-sf).** To measure the job satisfaction of participating school psychologists, the short-form Minnesota Satisfaction Questionnaire was utilized. The Minnesota Satisfaction Questionnaire (MSQ) is one of the most widely used instruments in the measurement of job satisfaction (Scarpello and Campbell, 1983; Spector, 1997; Tandon & Tyagi, 2012) and its validity and reliability have been proven over the almost 50 years that it has been in use. The long form MSQ consists of 100 items, which make up 20 scales/facets of a job (each facet is represented by five items). The MSQ facets are ability utilization, achievement, activity, advancement, authority, company policies and procedures, compensation, co-workers, creativity, independence, moral values, recognition, responsibility, security, social service, social status, supervision-human relations, supervision-technical, variety, and working conditions.

The short-form MSQ is comprised of 20 items, designed to measure 20 separate facets of job satisfaction. The response format for both the short and long versions of the MSQ are identical. The short-form MSQ measures three satisfaction scales, namely intrinsic satisfaction, extrinsic satisfaction and overall job satisfaction. Intrinsic satisfaction refers to occupational conditions (how people feel about the nature of the job's tasks), while extrinsic satisfaction refers to environmental conditions (how people feel about features of the job that are external to the work; Weiss et al, 1967). Weiss et al. (1967) reported test-retest reliability correlation coefficients ranging from .70 (at one year) to .89 (at one week), an internal consistency value of .90 for the General Satisfaction scale. Scales are created by taking the mean of constituent items.

Subscale and scale scores have a possible range from 1 to 5, with higher scores indicating greater job satisfaction.

Respondent school psychologists were asked to express the extent of their satisfaction with each of the 20 facets of their job on a five point Likert scale ranging from 1 (very dissatisfied) to 5 (very satisfied).

**School Climate Survey (SCS)- Staff Version Revised.** The dimensions of social structure and support also are seen in another popular measure of school climate, The School Climate Survey (SCS) includes student, staff, and home forms (Haynes, Emmons, & Comer, 1994; Emmons, Haynes, & Comer, 2002). There are elementary/middle school and high school versions of each form. The SCS was developed to evaluate the Comer School Development Program at Yale University (Emmons & Comer, 2009; Haynes, et al., 1997). In addition to the teacher job satisfaction studies previously mentioned it also has been used in studies relating school climate to self-identified social and emotional problems among students (Kuperminc, Leadbeater, Emmons, & Blatt, 1997; Kuperminc et al., 2001) and faculty turnover, and school and class size faculty turnover (Koth, Bradshaw, & Leaf, 2008).

Although the SCS assesses both social support and structure, greater emphasis is placed on the former. On the most recent edition of the staff version (Emmons et al., 2002) seven of the nine subscales focus on social support: Achievement Motivation, Collaborative Decision-Making, Equity and Fairness, Leadership, School/Parent/Community Relations, Staff Dedication to Student Learning and Staff Expectations. The final subscales School Building and Order and Discipline (which assesses appropriate behavior), focuses on structure.

According to the scale's creators, 20 educators evaluated the survey for content validity. Haynes, Emmonds, and Ben-Avie (2001) of the Yale Child School Developmental Program, the

raters were given operational definitions of each variable and asked to perform two tasks. The first task was to indicate the variable that each item best fits. The second task was to state how sure they felt about the placement of the item into the variable by selecting one of three choices. Items with inter-rater agreement, and with a comfort mean greater than 2.0 were also selected (Haynes, Emmons, & Ben-Avie, 2001).

For the reliability or internal consistency of the 2002 edition, and across both elementary/middle and high school versions, alpha coefficients range from .62 to .89 with a median of .75. Parent Involvement and Sharing of Resources are the least reliable factors- .68 and .70, and .75 and .62, respectively, for elementary/middle and high school versions (Emmons et al., 2002). The more consistent the responses are, the higher the reliability. Please refer to Appendix H for complete subscale definitions and Chronbach's Alpha scores for individual subscales.

Respondent school psychologists were asked to express the strength of their agreement or disagreement with each statement about the school environment in which they work on a five point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The higher the score on the variable, the greater the amount of that quality respondents perceive their school as having. There are 54 items on the staff version of the School Climate Survey. All of the variables are scored in the positive direction: the higher the score, the greater the amount of that quality that staff perceives the school as having. Responses were coded and reverse scored as established by the scale's authors.

A cluster score for each variable was computed by adding together the scores of the items that defined that variable and then by dividing the sum of the total of items that defined that variable. An overall SCS scale is obtained by taking the mean of all 54 items on the measure.

Thus, subscale and scale scores have a possible range between 1 and 5. Negatively-worded items are reverse-scored prior to computation of the subscales and overall scale, such that higher scores are indicative of more positive views of the school climate.

**Rotter's Internal External Locus of Control Scale (I-E scale).** The most commonly used inventory for the exploration and study of locus of control is Rotter's (1966) internal-external locus of control scale (I-E scale). The I-E scale is a 23 item forced choice questionnaire with six filler items, which are not included in the final score (or in the survey for this study), for a 29-item scale. Each item consists of a pair of alternatives lettered *a* or *b*. An example item is: *a*) "Many times I feel that I have little influence over the things that happen to me" (external locus of control), and *b*) "It is impossible for me to believe that chance or luck plays an important role in my life" (internal locus of control). The rewording of some items and the addition of six filler items intends to disguise the purpose of the test. The I-E scale is scored in the external direction, that is, the higher the score the more external the individual. An individual may score from 0 (internal) to 23 (external). Rotter (1966) reported test-retest reliabilities for several samples that varied from 0.49 to 0.83, depending upon the time interval and the sample involved. He also reported relatively stable internal consistency estimates ( $r = 0.65$  to  $0.76$ ). As Rotter (1990) argued, the non-comparability of the items in a scale of this type make it difficult to achieve high estimates of internal consistency.

The measure is scored by assigning a value of 1 to the "external" responses in each pair and a 0 to the "internal" responses. Averaging the overall scores arrives at the total score for each respondent. For the sake of brevity, the six dummy items will be removed from the final survey instrument, leaving 23-items to measure locus of control. The scores for all 23-items will

then be summed to arrive at a respondents overall locus of control orientation. The higher the score the more external the locus of control orientation of the individual.

### **Variable Definitions**

The following terms are defined to aid in the understanding of the problem statement and research questions relevant to this research:

#### **Predictor/Explanatory Variables (IVs):**

- *Perceived School Climate*: An individual's feelings or attitudes that are elicited from a school's environment as measured by the School Climate Survey.

Demographic variables (age, sex, degree type, location type, and years of experience) and "expectation" are included as control variables that can be expected to confound relationships between locus of control, school climate, and job satisfaction.

- *Age*: measured in chronological years.
- *Gender*: distinction between males and females.
- *Degree type*: differentiation between master's degree, specialist (advanced study) degree and doctoral (PhD, PsyD, EdD) degree recipients.
- *Location type*: differentiation of rural, urban or suburban location of school
- *The chronological years of "experience"*: begins with the date of a first post-internship contract an individual signs. This score is used in the additional interpretation of "early career" (1-5 years experience) to "veteran" (6 years and over) school psychologists.
- *Expectation*: measured by a single item ("Please rank how closely your current position matches the role you thought you'd play when you accepted your

position”) scored on a 5-point rating scale ranging from 1 ‘doesn’t at all’ to 5 ‘exactly what I expected.’

**Response Variable (DV):**

- *Job Satisfaction:* the contentment of an individual because of his or her job as measured by the Minnesota Satisfaction Questionnaire, short form scale.

**Moderator Variable:**

- *Locus of Control:* An individual’s generalized expectancies for internal versus external sources of reinforcement in response to a given action or activity as measured by Rotter’s I-E scale.

**Statistical Methodology**

A number of statistical analyses were conducted to evaluate the study objectives. These are detailed as follows:

**Data screening.** Data were screened for quality and an excess of missing responses. Items and cases with an excess of missing responses were removed.

**Description of the sample.** Frequency and percentage data were tabulated in order to characterize the sample in terms of gender, age, education level, location type, years in occupation and years in current job, state, and grades worked with. For ratio-level data (age, years in occupation and years in job), the means, standard deviations, and minimum/maximum values were also computed. Three Likert-items on the survey asked respondents to rate the match between their expectations and career, and their desire to leave their current job or profession. Frequency/percentage data were tabulated for the responses and the median responses were calculated.

**Creation and description of scale scores.** Using the documentation accompanying the MSQ-sf, SCS, and LOC questionnaires, the subscales for each section and the overall scores were tabulated. For the MSQ-sf and SCS, this involved taking the mean of the constituent items. For the LOC, the scoring procedures required summing the “external” forced-choice alternatives. The scores on the subscales were then characterized using the descriptive statistics of the mean, standard deviation, range (minimum and maximum scores observed in the sample), skewness and kurtosis. Histograms were also prepared for each total score in order to provide visualization of the score distributions. Univariate outliers were screened for by computing Z scores, and any cases with Z scores that exceeded  $\pm 3$  were removed.

**Relationship between scale scores and demographic variables (RQ1 to RQ3).** For RQ1 through RQ3, similar statistical methodologies were employed. Descriptive statistics were first calculated for the scales (MSQ-sf for RQ1, SCS for RQ2, and LOC for RQ3) as a function of the demographic variables. Then, inferential analyses were performed to determine what relationships existed between the demographic variables and the scale scores. The technique used depended on the level of measurement of the demographic variable. For nominal variables, the independent samples t-test was used for variables with only two categories (gender) and the one-way ANOVA was used for variables with more than two categories (degree level, location type). If indicated by a statistically significant one-way ANOVA, post-hoc testing was conducted using the Least Significant Difference (LSD) test. Fisher’s LSD procedure is known to preserve the familywise type I error rate at the nominal level of significance (i.e.,  $\alpha = .05$ ) if the omnibus *F* test is statistically significant, and there are only three groups (Meier, 2006).

Age and years in occupation were ratio-level variables and thus, Pearson correlation coefficients were calculated between these variables and the scale score. Career expectation was

an ordinal level variable, and as such the relationships with the scale scores were investigated using Spearman's rho. Spearman's rho is the nonparametric alternative to the Pearson's correlation coefficient, in which the data are first converted to ranks and then the Pearson correlation coefficient is computed on the ranked data. It is used when the data do not meet the underlying assumptions of the Pearson correlation, such as when one or both of the variables consist of ranked (i.e., ordinal) variables (McDonald, 2009).

**Investigation of multivariate outliers.** Prior to conducting the analyses of the relationships amongst the scales, the data were screened for the presence of multivariate outliers. This was accomplished by regressing the three total scale scores on case ID, and saving the Mahalanobis Distance ( $D^2$ ) values. The  $D^2$  values were compared to the chi-square distribution at  $p < .001$  with three degrees of freedom, and cases exceeding this value were considered multivariate outliers.

**Prediction of MSQ-sf from SCS subscales (RQ4).** To address RQ4, correlation and multiple regression techniques were used. First Pearson correlations were computed to determine the zero-order relationships between the SCS subscales and the MSQ-sf total score. Then, multiple regression was employed with the MSQ-sf as the dependent variable, and the SCS subscales as the independent variables. This analysis indicated to what degree the various SCS subscales were uniquely predictive of the MSQ-sf. Finally, step-wise multiple regression was conducted with cross-validation, to determine what subset of SCS subscales was most predictive of the MSQ-sf.

**Prediction of MSQ-sf from SCS and LOC scales (RQ5).** First, the zero-order correlations were computed amongst the three scale scores. Then, the MSQ score was regressed by the SCS and LOC scales to determine the degree to which these two scales predicted job

satisfaction. Regressions were repeated with and without demographic control variables as identified in RQ1.

**Moderation Analysis of LOC in the prediction of MSQ from SCS (RQ6).** Moderation was assessed by computing an interaction term between LOC and SCS. Then, a multiple regression analysis was run, predicting the MSQ from the SCS, LOC, and their interaction. The variables were mean-centered prior to analysis to avoid any difficulties with multicollinearity. All analyses were conducted using SPSS v.20. An alpha level of .05 was used as a decision point for statistical significance.

## Chapter 4: Results

### Restatement of Purpose

The purpose of this study was to examine the effect of locus of control on the relationship between school psychologists' perception of school climate and their overall level of job satisfaction.

### Organization of the Chapter

This chapter contains the results obtained from the statistical analysis of the survey data, and evaluation of the research questions. Descriptive statistics are reported in order to characterize the demographic nature of the sample. This is followed by a description of the scale and subscales scores for the three questionnaires. Following these descriptive analyses, the research questions are addressed in turn. The results of the statistical analyses are evaluated.

### Description of the Sample

The demographic information for the sample is presented in Table 1. The respondents were predominantly female (85.2%). The age of the sample ranged from 25 to 78 years of age. The mean age was 39.42 years ( $SD = 11.95$ ).

Most of the respondents had obtained a Masters/Specialist degree (71.0%). Another 21.3% had Doctoral degrees, and 7.7% had obtained their Master/Specialist degree with a Doctoral degree in progress.

Approximately half the sample worked in schools in Suburban areas (49.0%), while 21.9% worked in urban schools and 29.0% worked in rural locations.

The number of years respondents had worked in the occupation ranged from 1 to 47 years, with a mean of 11.09 years ( $SD = 9.61$ ). The number of years that participants had worked in their present school ranged from 0 to 27 years, with a mean of 7.81 years ( $SD = 7.28$ ).

The respondents were asked to report what U.S. State they worked in, and the responses are summarized in Table 2. The states were categorized into the primary U.S. Census regions of Northeast (Region 1), Midwest (Region 2), South (Region 3), and West (Region 4).

Approximately half the sample worked in the Northeast region (49.0%) and the bulk of the remainder worked in the South region (42.6%). There were few respondents from either the Midwest (5.2%) or the West (3.2%) regions.

The sample reported what grades they worked with in their current positions, and the responses are shown in Table 3. Respondents could select as many grades as applicable. Approximately 69-70% of the sample reported working with grades K to 2. About 72% worked with grades 3 to 5. The percentages declined with higher grades. About 54-57% of the sample reported working with grades 6 to 8, and about 47 to 49% worked with students in grades 9 to 12. A small proportion (5.2%) worked in adult education. There were a large proportion that reported working with 'Other' grades (27.1%) --- most of these individuals (25.2%) stated that they worked with students at the early childhood/pre-K level.

Three items on the survey asked respondents to rate whether their role met their expectations, and their desire to leave the job or career. The responses are shown in Table 4. On average, individuals felt the role as a school psychologist matched their expectations, with the median response being 'About the same' (3). A combined percentage of 27.7% felt their role did not meet their expectations (responses of 'Much less' or 'Somewhat less'), while 36.8% felt their expectations were exceeded (responses of 'Much more' or 'Somewhat more').

There was a 'Moderate' (3) desire expressed in the sample to leave their current job within 5 years overall. The median desire to leave the profession of school psychology within the next 5 years was 'Low' (4).

## Description of the Scales

The following section presents the descriptive statistics for the three scales used in this research. Job satisfaction was the primary dependent variable, and was assessed using the Minnesota Satisfaction Questionnaire. The independent variable, school climate, was measured using the School Climate Survey. The moderator variable, locus of control, was evaluated using Rotter's Internal-External Locus of Control scale.

**Minnesota Satisfaction Questionnaire – short form (MSQ-sf).** The descriptive statistics for the overall scale and the two subscales are shown in Table 5. The distribution histogram of scores for the overall scale is shown in Figure 1. The overall scale mean was 3.66 ( $SD = 0.53$ ), with a range of scores from 1.70 to 4.85. The IS subscale mean was slightly higher than the total, at 3.89 ( $SD = 0.55$ ) and the ES subscale was lower at 3.17 ( $SD = 0.75$ ).

The distribution of overall scores was slightly negatively skewed. As is apparent in Figure 1, the negative skew was driven by one low outlier. This one outlier had a Z score that exceeded a score cut-off of  $Z \pm 3$ , and as such this case was removed from the analyses involving the MSQ scale.

**School Climate Survey (SCS).** The descriptive statistics for the SCS subscales and overall scale are presented in Table 6. A distribution histogram of scores for the total scale is also shown in Figure 2. The subscales with the highest means were School building ( $M = 4.24$ ,  $SD = 0.69$ ), Equity and Fairness ( $M = 4.11$ ,  $SD = 0.62$ ), and Achievement Motivation ( $M = 4.03$ ,  $SD = 0.55$ ). The subscales with the lowest means were School Parent Community Relations ( $M = 3.51$ ,  $SD = 0.81$ ), Collaborative Decision Making ( $M = 3.60$ ,  $SD = 0.66$ ), and Order and Discipline ( $M = 3.67$ ,  $SD = 0.81$ ). The mean score for the total SCS scale was 3.85 ( $SD = 0.54$ ), and a range from 1.80 to 4.83. The distribution was negatively skewed, and as demonstrated in

Figure 2 this was partially due to the presence of one low outlier. This case had a standardized (Z) score lower than the cutoff of  $Z \pm 3$ , and was thus removed from the analyses involving the SCS scale.

**Rotter's Internal-External Locus of Control Scale (LOC).** The descriptive statistics for the LOC scale are shown in Table 7, and the distribution of scores is depicted in Figure 3. The average score was 8.15 ( $SD = 3.73$ ) indicating that the sample on average, tended towards the internal (low) end of the spectrum rather than the external (high) end of the spectrum. The distribution of scores in Figure 3 reveals a relatively normal distribution without indication of outliers. Indeed, there were no cases with Z scores exceeding the cutoff of  $\pm 3$ .

### **Research Question 1**

*RQ1: In a sample of practicing school psychologists:*

- (a) *What is the amount of job satisfaction, as measured by the MSQ-sf, with respect to the demographic variables: gender, age, degree level, location type, years working in profession, and career expectations met or unmet; and,*
- (b) *What are the relationships between job satisfaction and the aforementioned demographic variables?*

The results are shown in Table 8. The mean MSQ score in males was 3.72 ( $SD = 0.56$ ) and the mean in females was 3.66 ( $SD = 0.50$ ). This difference was not statistically significant.

There was a significant positive correlation between respondents' age and their MSQ scores ( $r = .299, p < .001$ ). A scatterplot depicting this relationship is shown in Figure 4. With advancing age, job satisfaction as measured by the MSQ scale increased.

The mean satisfaction levels according to the respondents' degree level or location type were not significantly different.

A positive, statistically significant correlation was observed between the years in occupation and the MSQ score ( $r = .317, p < .001$ ). The scatterplot in Figure 5 shows that as years in the occupation increased, so did the job satisfaction level.

There was a large, significant relationship between the degree to which the respondents' career expectations were met and their job satisfaction ( $\rho = .590, p < .001$ ). A bar chart showing the mean MSQ scale scores according to the categories of career expectation is presented in Figure 6. With each successive step in whether the career expectation was unmet, met or exceeded, there was an increase in job satisfaction as reflected in the mean MSQ scores.

## **Research Question 2**

*RQ2: In a sample of practicing school psychologists:*

- (a) What is the amount of perceived overall school climate, as measured by the SCS, with respect to the demographic variables: gender, age, degree level, location type, years working in profession, and career expectations met or unmet; and,*
- (b) What are the relationships between perceived overall school climate and the aforementioned demographic variables?*

The results are presented in Table 9. The mean SCS score for males was 4.04 ( $SD = 0.46$ ) and the mean for females was 3.83 ( $SD = 0.52$ ). This difference was not statistically significant.

There was a significant, positive relationship between the respondent's age and the SCS scores,  $r = .312, p < .001$ . This relationship is shown in Figure 7.

No relationship was observed between the degree level of the respondent and the SCS scores.

There was a significant difference in SCS scores according to the location type,  $F(2,147) = 10.55, p < .001$ . Respondents in suburban schools had the highest SCS scores ( $M = 4.02, SD = 0.43$ ), followed by respondents in rural schools ( $M = 3.83, SD = 0.48$ ), and respondents in urban schools had the lowest SCS scores ( $M = 3.56, SD = 0.60$ ).

A significant positive relationship was observed between years in occupation and the SCS scores,  $r = .395, p < .001$ . The scatterplot is shown in Figure 8. With increasing years in the occupation, there was an increase in perceived school climate as assessed by the SCS scale scores.

A significant relationship was noted between the degree to which career expectations were met and school climate scores. Figure 9 shows the mean SCS scores according to the level of career expectation met. There was an increase in mean school climate scores as the concordance between career and expectations became more positive.

### **Research Question 3**

*RQ3: In a sample of practicing school psychologists:*

- (a) What is the amount of internal locus of control, as measured by the LOC scale, with respect to the demographic variables: gender, age, degree level, location type, years working in profession, and career expectations met or unmet; and,*
- (b) What are the relationships between locus of control and the aforementioned demographic variables?*

The results are shown in Table 10. Lower scores on the LOC reflect more internal locus of control and higher scores indicate more external locus of control.

The mean LOC score was 7.65 ( $SD = 3.94$ ) in males and 8.24 ( $SD = 3.70$ ) in females. This difference was not statistically significant.

A significant negative relationship was observed between age and LOC scores,  $r = -.218$ ,  $p = .007$ . The scatterplot depicting this relationship is shown in Figure 10. Thus, with advancing age there was greater internal locus of control.

There was no relationship between degree level or location type and the locus of control score.

Years in occupation was significantly, negatively related to LOC scores,  $r = -.216$ ,  $p < .007$  and the relationship is shown in Figure 11. Higher years in the occupation was associated more internal locus of control.

Career expectations were also negatively related to the LOC score,  $r = -.173$ ,  $p = .031$ . The mean LOC scores according to the categories of the expectation question are shown in Figure 12. More positive ratings of career expectations were associated with lower LOC scores, indicating greater internal locus of control.

#### **Research Question 4**

*RQ4: What elements of school climate, as measured by the SCS subscales, are predictive of job satisfaction, as measured by the MSQ scale?*

The intercorrelations between the MSQ scale and the SCS subscales are shown in Table 11. Firstly, it can be observed that there were significant positive correlations between all the SCS subscales and the MSQ scale. The size of the correlations ranged from approximately 0.33 for the relationship between the SCS with the Equity and Fairness (EF) subscale, to 0.47 for the correlation between the SCS and the School Parent Community Relations (SPCR) subscale. Secondly, there were significant, positive, large intercorrelations between the subscales of the SCS with one another. This can pose a problem for multiple regression, since ideally the IVs are correlated with the DV but not with other IVs (Tabachnick & Fidell, 2007).

The results of the regression of MSQ scores on the set of SCS subscales are shown in Table 12. Overall the group of SCS subscales significantly predicted MSQ scores,  $F(9,139) = 7.316, p < .001, R^2 = .321, \text{Adj. } R^2 = .277$ . However, none of the individual subscales were significant individual predictors of MSQ scores (although SPCR approached significance,  $p = .051$ ).

### **Research Question 5**

*RQ5: Do school climate and locus of control predict job satisfaction?*

Due to the significant relationship between some demographic variables and the dependent variable (cf. Table 8), the analysis was conducted first without any demographic control, and then with controlling for relevant demographics.

Firstly, the zero-order correlation coefficients were computed between the three scales and are shown in Table 14. A scatterplot matrix depicting the relationship amongst the three scales is presented in Figure 13. There was a significant, positive correlation between MSQ scores and SCS scores ( $r = .554, p < .001$ ). Thus, the more positive the perceptions of school climate, the higher the job satisfaction. A negative correlation was obtained between the MSQ scores and the LOC scores ( $r = -.291, p < .001$ ). Thus, a more internal locus of control was associated with higher job satisfaction. Finally, there was a negative correlation between SCS scores and LOC scores ( $r = -.280, p < .001$ ). Therefore, a more internal locus of control was associated with more positive views of the school climate.

The results from the multiple regression of MSQ scores on the SCS and LOC scores together are shown in Table 15. The scales significantly predicted job satisfaction, and together accounted for 32.7% ( $R^2$ ) of the variance in MSQ scores. Both coefficients were statistically significant, indicating that each scale contributed unique variance to the prediction of job

satisfaction. For SCS, the coefficient was positive, indicating that higher school climate scores predicted greater satisfaction,  $\beta = .513, p < .001$ . For LOC, the regression coefficient was negative indicating that more internal locus of control was predictive of greater job satisfaction,  $\beta = -.148, p = .039$ .

As previously shown (cf. Table 8) there were statistically significant relationships between age and MSQ scores, as well as between years in occupation and MSQ scores. To remove the possible confound that these variables may have on the relationship between the SCS and LOC scales and the LSQ scale, they were both considered for entry into the regression equation. However, since age and years in occupation were expected to be highly correlated, it was only appropriate to include one of these variables. Indeed, the correlation between age and years in occupation was  $r = .848 (p < .001)$ , indicating considerable overlap between these two variables. Since years in occupation had a slightly higher linear relationship with MSQ scores than did age, years in occupation was used as the control variable in the analysis. It should be noted that, although career expectations was also significantly related to MSQ scores, this variable was not considered to be a control variable to be statistically adjusted for in the regression equation. Rather, it was considered to be conceptually overlapping to job satisfaction (since one would expect career expectations and job satisfaction to be inextricably linked), and thus a proxy of the dependent variable.

The results of the regression of MSQ on SCS and LOC scores, after controlling for years in occupation are shown in Table 16. After accounting for years in occupation, SCS remained a statistically significant predictor of job satisfaction ( $p < .001$ ). However, LOC was no longer a significant predictor of MSQ scores ( $p = .077$ ). The zero-order, partial, and part correlations are also shown in the Table to help interpret the relationships.

Upon inspection of the values in the table one can see the decrease in the values between the zero- order correlations and the semi-partial correlations. Thus, the individual relationships between years in occupation and MSQ is .336; however, when the variance in years of occupation that can be accounted for by the SCS and LOC scores is removed, the correlation between the unique part of years of occupation and the MSQ scale was reduced to .102. Similarly, the zero-order correlation between the LOC scale and MSQ scale was -.291; however, upon removal of shared variance from the LOC scale, the correlation with the MSQ scale was only -.120. This results in the lack of significance in LOC predicting MSQ scores, in the presence of years of occupation and SCS.

#### **Research Question 6**

*RQ6: Does locus of control moderate the effect that overall perceived school climate has on job satisfaction?*

The results of the analysis are shown in Table 17. First, the SCS and LOC scales (mean centered) were added to the equation in step 1. These results mirror that reported in Table 15 but are repeated here for ease of comparison. In step 2, the interaction term between SCS and LOC was added to the regression equation. It can be observed that the interaction term was not statistically significant,  $B = -.001$ ,  $p = .948$ . The small regression coefficient (-.001) indicates that there is almost no change in the regression coefficient of SCS at different LOC levels. Therefore, these results indicate that LOC did not moderate the relationship between SCS and MSQ.

To further investigate this issue, the conditional effects of SCS on MSQ at three different levels of LOC were calculated, and are shown in Table 18. In the absence of other theoretical reasons for choice of levels, it has been suggested that the mean, 1 SD below the mean, and 1 SD

above the mean can be used (Tabachnick & Fidell, 2007). As evidenced in Table 18, there was little difference in the regression coefficients between SCS and MSQ at different levels of LOC. If a moderating effect was present, one would expect to see different slopes at different LOC levels.

The regression analysis was repeated with the addition of years of occupation as a control variable, to determine if this affected the results. Years in occupation was entered in Step 1, the SCS and LOC scales (mean centered) were entered in step 2, and the interaction between the SCS and LOC scales were entered in step 3. The results are shown in Table 19. The analyses in step 1 and step 2 have previously been reported in analysis of RQ5. The addition of the interaction term in step 3 was not statistically significant,  $B = .002$ ,  $p = .927$ . As with the results of the analysis without year of occupation in the equation, there was no indication of a moderating effect of LOC on the relationship between SCS and MSQ.

To illustrate the relationships between the variables, a scatterplot was created and is shown in Figure 14. The relationship between the SCS and MSQ scales is depicted, and the size of the marker indicates the LOC score. It can be observed that the size of the LOC score appeared randomly distributed within the scatterplot; there was no indication that individuals with more internal LOC scores (smaller markers), had a different pattern of relationships than those with more external LOC scores (larger markers).

## Chapter 5: Discussion

### Summary

The purpose of this study was to investigate the relationship between perceived school climate and job satisfaction, and the moderating effect of locus of control on this relationship. Previous studies have suggested that job satisfaction effects performance, productivity, professional attitude, and personal and social variables. Therefore, a study of what leads to higher job satisfaction is a worthy pursuit in light of the influences that school psychologists have on the educational decisions that affect children's lives.

First, the influence of demographic variables on the scales was examined (RQ1 to RQ3). Age and years in occupation were significantly related to all three questionnaire scores: higher age and higher years in occupation were associated with higher job satisfaction, more positive school climate scores, and more internal locus of control. There were also positive correlations between the degree to which one's career expectations were met and higher job satisfaction scores, more positive school climate scores, and a more internal locus of control. School climate was also associated with location type, with respondents in suburban, rural, and urban schools having the highest to lowest SCS scores, respectively.

Investigation of which subscales of SCS were most predictive of MSQ scores indicated that while overall the group of SCS scores, as a whole, were highly predictive of job satisfaction, none of the individual subscales were uniquely predictive of MSQ scores due to the extensive inter-relation between each of the subscales. This finding was demonstrated using stepwise regression, which definitively failed to identify a stable subset of SCS scores that were most predictive of the MSQ. Thus, it appeared that the single measure of the SCS overall score was the best measure of school climate in the prediction of job satisfaction.

In comparing perceived school climate and locus of control, both more positively perceived school climate and a more internal locus of control were separately and uniquely predictive of job satisfaction (RQ5). However, once years in occupation were accounted for, only perceived school climate remained predictive of job satisfaction. Furthermore, investigation of a moderating relationship (RQ6) revealed no interaction between locus of control and perceived school climate in the prediction of job satisfaction. Also, there was no evidence of a separate moderating effect of locus of control on the relationship between perceived school climate and job satisfaction. The predictive relationship between the SCS and MSQ scales, however, was stable across high (external), medium (mean), and low (internal) levels of locus of control.

## **Conclusions**

The findings derived from this study confirmed a significant relationship between job satisfaction and both perceived school climate and locus of control in school psychologists. School psychologists with internal locus of control, believing that events result primarily from their own action, and assuming that their efforts will be successful, are in general more satisfied with their jobs. School psychologists, who perceive a more positive school climate, are also more satisfied with their jobs. However, when taking into consideration how many years of experience the individual has been in the profession, locus of control is no longer a statistically significant predictor of job satisfaction.

According to the results, the longer someone is in the career, the higher his or her level of satisfaction. Veterans in their field are often there long enough to see many changes (favorable and unfavorable), but have stayed the course and have a large enough personal investment in the field to continue working as a school psychologist within the educational system. Increased age

and years of experience also indicated a more positive perception of school climate, but there was no correlation between those individuals' locus of control and perceived school climate in the predication of job satisfaction. It is reasonable to interpret this finding (as well as the finding that the predictive relationship between perceived school climate and job satisfaction as stable across all levels of locus of control) as an indication that job satisfaction, and an overall more positive outlook of the school as a work environment, are a learned behavior instead of a trait (e.g., behaviorism over personality theory).

School psychology professionals, who remain in the field long enough, report higher job satisfaction, a better climate in their school working environment, and more internal locus of control. Results may also be interpreted as the longer an individual stays in the career, the more professionally confident he or she becomes. As years of experience increase, so does the feeling that one knows what he or she is doing. This perception is likely felt by both the professional and his or her professional colleagues. This brings about the potential that an individual is more respected by the people he or she is working with, allowing for a more internalized locus of control, because the school psychologist is more in control of what he or she is doing in the job. Early on in the career, other people are telling a professional what is expected. There is an interaction effect that would add to the thought that there is a learned trait instead of a personality issue. When controlled for years of experience, locus of control disappeared as significant. Years of experience and locus of control are so closely related that they must be considered to go hand in hand.

No single subset, or subscale, of the SCS was found to be more predictive of job satisfaction than any other, regardless of age. However, the total group of SCS scores as a whole was found to be highly predictive of job satisfaction. This is not an unexpected finding as school

climate is a global concept, thought to reflect the functioning of a school in a holistically meaningful way. Therefore, it would have been surprising if individual components (subscales of the SCS) had shown to independently impact the responding school psychologists' job satisfaction. Job satisfaction means the contentment of an employee because of the job. If job satisfaction is handled as the consequence resulting from the comparison between the expectations a school psychologist has from the job, and the actual experience of working in the job, then a positive correlation between expectations met and a positive perception of the school's climate (and higher satisfaction with the job) is not surprising.

This study provides a valuable collection of ideas and facts that can be used in understanding the work force of present day school psychologists, and in understanding the dynamics and resultant effects between overall perceived school climate and overall job satisfaction. Previous studies have explained a worker's job satisfaction as a function of both the individual's personal characteristics, and the characteristics of the job itself (i.e., location of the school), using variables like age, educational status, and time in position. This current study did not find a statistically significant relationship between type of degree (e.g., MA degree or PhD) or gender with the job satisfaction of school psychologists; however, location of school was shown to have an effect. The effect of age and years of experience over other measured personal characteristics is an interesting finding that has not been a consideration in past studies on the profession of school psychology.

### **Implications for Practice**

While any results gleaned from this research study should be viewed with caution, the results of this study have implications for both future research and for the future of the profession. Despite the few position papers related to the role of the of school psychologist,

there have been even fewer studies utilizing empirical methods to gather information regarding the satisfaction derived from doing the job, school psychologists' perception of school climate, or the level of locus of control of the professionals in the field. An attempt to replicate the results of this current study with a larger, more diverse, sample of professional school psychologists is warranted.

The perception of a positive school climate is associated with greater job satisfaction. A positive environment promotes a safe and productive workday. These results contribute to the body of research to show association between positive perceptions of school climate and improved outcomes for students and teachers, as well as school psychologists. Maintaining morale and the retention of professionals in the field is of the utmost importance for School Psychology to develop and grow as an agent of change for students' lives and the academic system. For these reasons, a focus on fostering positive school climates (instead of measuring negative outcomes), and maintaining school psychologist professional commitment has the potential to retain a more happily committed professional body.

### **Limitations**

This researcher acknowledges several limitations that could make the internal and external validity of this study vulnerable, and these limitations reduce the power of this study's findings. Caution should be used when making generalizations based on these findings alone.

The first possible threat to internal validity is the effect that history may have on the manner in which individuals participated in the study. It is possible that participants had been influenced by an event prior to completing the survey that may have swayed their responses. The second threat to internal validity may be the effect of testing. Studies have shown that testing

materials, like the surveys used in this research, tend to evoke a reaction from participants that may influence them to respond in a certain, more socially desirable way.

Threats to external validity include the inability to generalize the present results to other populations. The study was limited to school psychologists who are members of the California, Delaware, Illinois, Kentucky, Maryland, New Hampshire, New Jersey, New York, North Dakota, Ohio, and Pennsylvania state school psychologist associations. Some states (IL, NH, OH, PA, and VT) had only one participant. It is highly likely that this single participant was the webmaster or contact piloting the survey for the state association. Additionally, the data were collected within a 1-month time span from the end of December to the end of January. Keeping the survey window open longer may have allowed additional school psychologists of the participating state associations to partake. The addition of more responses over a longer period of time, or collected at a different point in the school year (beginning or end as opposed to middle) may have resulted in a vastly different data set since responsibilities vacillate for school psychologists during the school year. Many, if not all of the participants had a vacation or break during the survey's time window. Being removed from the work environment, during a time of relaxation, individuals may see (and report) their professional experience differently. Furthermore, members of the state organizations who are invested enough in the profession to join and maintain their membership in said organization are potentially more engaged with their profession than non-association members. Thus, the most serious limitation is that one presumes that the school psychologists who provided response are representative of all school psychologists.

### **Recommendations for Further Study**

The following recommendations for further research can be made based on the findings from this research study:

This survey was limited to an extremely small subset of school psychologists, who were affiliates of the state associations that agreed to pass along the survey link and information to its membership. Opening this survey up to school psychologists that are not members of a state association may provide for a greater collection of information across the entire spectrum of individuals in the profession. Furthermore, increasing the sample to include individuals still in the process of a training program can yield valuable information regarding expectations at their purest starting point. A longitudinal study, following students through the first 10 years of their career, along with fluctuations in satisfaction, perceived school climate, and locus of control would extend the results beyond one picture in time.

It would be of great interest to further disaggregate the collected data to compare the perceptions of school psychologists who have been within the profession for 10 or more years compared to school psychologists who have been in the profession for 9 or fewer years. This particular study did not disaggregate data, nor did it seek to find a balance between the experience levels of the school psychologists who took part. This information could provide the field with insight regarding the identifying information about the individuals who have found satisfaction in a long-term career in school psychology. To this end, it would also be beneficial to the endurance of the career to study individuals who have left the career altogether. The information collected can be used as a springboard for discussing and researching how to improve the professional environment for school psychologists and for preventative planning in dealing with disappointments and difficulties faced by professionals in the field.

In past studies, retention, or an individual's intention to maintain employment in a workplace, has been correlated with job satisfaction (Firth et al., 2007). Organizations invest in hiring and developing their employees. Hence, employee turnover is a potential loss for any workplace. One of the most extreme consequences of an unsatisfactory job experience is burnout (Maslach, Schaufeli, & Leiter, 2001). Freudenberger (1974) initially developed the term "burnout" to describe the emotional and physical exhaustion of human service workers in health care services.

While job dissatisfaction and burnout are not synonymous, satisfaction in one's job is a consummate way to avoid burnout (Freudenberger, 1974), although, professionals who have burned out, or have become indifferent to their professional role and responsibilities do not necessarily quit. The ability of a school to not only retain employees, but to provide a working environment to maintain job satisfaction (and, in turn, avoid the negatives associated with low job satisfaction) aids in the achievement of organizational goals (Dess & Shaw, 2001).

Organizational climate has been shown to have direct influence on employee satisfaction and commitment; and organizational commitment was significantly negatively related to an intention to quit (Firth et al., 2007; O'Reilly & Charman, 1996). A study to include burnout factors and attrition (desire to leave or the actual completed exit from the career) in the field of school psychology would be the next progression from this research study.

## References

- Adenike, A. (2011). Organizational climate as a predictor of employee job satisfaction: Evidence from covenant university. *Business Intelligence Journal*, 4, 151-166.
- Alarcon, G., Eschleman, K. J., & Bowling, N. A. (2009). Relationships between personality variables and burnout: a meta-analysis. *Work and Stress*, 23 (3), 244-263.
- Americans with Disabilities Act (ADA), 42 U.S.C. §12101-12213 (2006) (amended 2008).
- Anderson, C . S. (1982). The search for school climate. *Review of Educational Research*, 52, 368-420.
- Basak, R., & Ghosh, A. (2011). School environment and locus of control in relations to job satisfaction among school teachers- a study from Indian perspective. *Social and Behavioral Sciences*, 29, 1199-1208.
- Bazeley, P. (2003). Defining 'early career' in research. *Higher Education*, 45, 257-279.
- Beach, R. & Lindahl, R. (2004). Identifying the knowledge base for school improvement. *Planning and Changing*, 35, 2-32.
- Bein, J., Anderson, D., & Maes, W. (1990). Teacher locus of control and job satisfaction. *Educational Research Quarterly*, 14, 7-10.
- Blegen, M. A. (1993). Nurses' job satisfaction: a meta-analysis of related variables. *Nursing Research*, 42(1), 36-41.
- Bradley-Johnson, S. & Dean, V. (2000). Role change for school psychology: The challenge continues into the new millennium. *Psychology in the Schools*, 37, 1-5.
- Brayfield, A. H., Roth, H. F. (1951). An index of job satisfaction. *Journal of Applied Psychology*, 35(5), 307-311.

- Brown, M.B. (1992). School psychologists' job satisfaction: ten years later. *Dissertation Abstracts International*, 54(03A), 0864.
- Bulach, C. R., & Malone, B. (1994). The relationship of school climate to the implementation of school reform. *ERS Spectrum*, 12, 3-8.
- Carrington, S. (1999). Inclusion needs a different school culture. *International Journal of Inclusive Education*, 3(3), 257-268.
- Carver, C. S., & Scheier, M. F. (2000). *Perspectives on personality* (4<sup>th</sup> ed.) Boston: Allyn and Bacon.
- Centers, R., & Bugental, D. E. (1966). Intrinsic and extrinsic job motivations among different segments of the working population. *Journal of Applied Psychology*, 50, 193-197.
- Chase, F. S. (1951). Factors for satisfaction in teaching. *Phi Delta Kappan*, 32, 127-132.
- Clark, A. E., Kristensen, N., & Westergaard-Nielsen, N. (2009). Job satisfaction and co-workers wages: Status or signal? *The Economic Journal*, 119, 430-447.
- Cohen, J., McCabe, L., Michelli, N. M., & Pickeral, T. (2009). School climate: Research, policy, practice, and teacher education. *Teachers College Record*, 111, 180-213.
- Cohen, R.D., Swerdlik, M.E., & Phillips, S.M. (1996). *Psychological testing and assessment: An introduction to tests and measurements* (3<sup>rd</sup> ed.) Mountain View, CA: Mayfield
- Collie, R. J., Shapka, J. D., & Perry, N. E. (2012). School climate and social-emotional learning: predicting teacher stress, job satisfaction, and teaching efficacy. *Journal of Educational Psychology*, 44, 1-16.
- Collie, R. J., Shapka, J. D., & Perry, N. E. (2011). Predicting teacher commitment: The impact of school climate and social-emotional learning. *Psychology in the Schools*, 48, 1034-1048.

- Connolly, L. M., & Reschly, D. (1990). The school psychology crisis of the 1990s. *Communiqué*, 19, 12.
- Conoley, J. C. & Gutkin, T. B. (1995). Why didn't, why doesn't school psychology realize its promise? *Journal of School Psychology*, 33, 209-217.
- Dalal, R. S., Lam, H., Weiss, H. M., Welch, E. R., & Hulin, C. L. (2009). A within-person approach to work behavior and performance: Concurrent and lagged citizenship-counter productivity associations, and dynamic relationships with affect and overall job performance. *Academy of Management Journal*, 52, 1051-1066.
- Dess, G. D., & Shaw, J. D. (2001). Voluntary turnover, social capital and organizational performance. *Academy of Management Review*, 26 (3), 446-456.
- Dillman, D. A. (2000). *Mail and Internet surveys: The tailored design method*. New York: J. Wiley.
- Emmons, C. L., & Comer, J. P. (2009). Capturing complexity: Evaluation of the Yale Child Study Center School Development Program. In R. Deslandes (Ed.). *International perspectives on contexts, communities, and evaluated innovative practices: Family-school-community partnerships* (pp. 204-219). New York, NY: Routledge.
- Emmons, C., Haynes, N. M., & Comer, J. P. (2002). *School climate survey: Elementary and middle school version (Revised Edition)*. New Haven, CT: Yale University Child Study Center.
- Fagan, T. K. (1981). Special educational services and the school psychologist. *Journal of Learning Disabilities*, 14, 383-384.
- Fagan, T. K., & Wise, P. S. (2000). *School psychology: Past, present, and future*. Bethesda, MD; National Association of School Psychologists.

- Fagan, T. K., & Wise, P. S. (2007). *School psychology: Past, present, and future* (3<sup>rd</sup> edition). Bethesda, MD: National Association of School Psychologists.
- Firth, L., Mellor, D. J., Moore, K. A., & Loquet, C. (2007). How can managers reduce employee intention to quit? *Journal of Management Psychology, 19* (2), 170-187.
- Freiberg, H. J. (1998). Measuring school climate: Let me count the ways. *Educational Leadership, 56*, 22-26.
- Freiberg, H. J. & Stein, T. A. (1999). Measuring, improving, and sustaining healthy learning environments. In H. J. Freiberg (Ed.) *School climate: measuring, improving, and sustaining learning environments* (pp. 11-29). Philadelphia: Falmer Press.
- Freudenberger, H. J. (1974). Staff burnout. *Journal of Social Issues, 30*, 159-165.
- Furnham, A. & Drakeley, R. J. (1993). Work locus of control and perceived organizational climate. *European Work and Organizational Psychologist, 3*(1), 1-9.
- Furnham, A. & Schaeffer, R. (2011). Person-environment fit, job satisfaction and mental health. *Journal of Occupational and Organizational Psychology, 57*, 295-307.
- Gadel, M. S. (1953). Productivity and satisfaction of full and part time female employees. *Personnel Psychology, 6*, 327-342.
- Haynes, N. M., Emmons, C., & Ben-Avie, M. (1997). School climate as a factor in student adjustment and achievement. *Journal of Educational and Psychological Consultation, 8*, 321-329.
- Haynes, N. M., Emmons, C., & Ben-Avie, M. (2001). *School development program*. New Haven, CT: Yale University Child Study Center.
- Haynes, N. M., Emmons, C., & Comer, J. P. (1994). *School Climate Survey: Elementary and Middle School Version*. New Haven, CT: Yale University Child Study Center.

- Heller, D., Ferris, D. L., Brown, D., & Watson, D. (2009). The influence of work personality on job satisfaction: Incremental validity and mediation effects. *Journal of Personality, 77*, 1051-1084.
- Hersey, R.B. (1932). Workers' emotions in shop and home; a study of individual workers from the psychological and physiological standpoint. Philadelphia: University of Pennsylvania Press.
- Ho, C. J. (1929). Which workers have good attendance? *The Personnel Journal, 7*, 385-389.
- Holland, J. L. (1996). Exploring careers with typology: What we have learned and some new directions. *American Psychologist, 51*, 397-406.
- Hoppock, R., & Hoppock, M. (1934). Do people like their jobs? *Journal of Adult Education, 6*, 290-292.
- Hoy, W. K., & Woolfolk, A. E. (1993). Teachers' sense of efficacy and the organizational health of schools. *Elementary School Journal, 93*, 355-370.
- Huebner, E. S., & Huberty, T. J. (1984). Burnout among rural school psychologists. *Research in Rural Education, 2*, 95-99.
- Huebner, E. S., & Mills, L. B. (1998). A prospective study of personality characteristics, occupational stressors, and burnout among school psychology practitioners. *Journal of School Psychology, 36*, 103-120.
- Ikeda, M. J. (2012). Policy and practice considerations for response to intervention: Reflections and commentary. *Journal of Learning Disabilities, 45*, 274-277.
- Individuals with Disabilities Education Act (IDEA), 20 U.S.C. §1400-1482 (2006).
- Jacob, S., Decker, D. M., & Hartshorne, T. S. (2010). *Ethics and law for school psychologists*. Wiley.

- Johnson, R., R. (2012). Police officer job satisfaction: a multidimensional analysis. *Police Quarterly, 15*(2), 157-176.
- Johnson, B., Stevens, J. J., & Zvock, K. (2007). Teachers' perceptions of school climate: A validity study of scores from the Revised School-Level Environment Questionnaire. *Educational and Psychological Measurement, 67*, 833-844.
- Jones, N. L., & Toland, C. J. (2009). Education of Individuals with Disabilities: The Individuals with Disabilities Education Act (IDEA), Section 504 of the Rehabilitation Act, and the Americans with Disabilities Act. Congressional Research Service, Library of Congress.
- Judge, T. A., Piccolo, R. F., Podsakoff, N. P., Shaw, J. C., & Rich, B. L. (2010). The relationship between pay and job satisfaction: A meta-analysis of the literature. *Journal of Vocational Behavior, 77*(2), 157-167.
- Kasperson, C. (1982). Locus of control and job satisfaction. *Psychological Reports, 50*, 823-826.
- Koth, C.W., Bradshaw, C.P., & Leaf, P.J. (2008). A multilevel study of predictors of student perceptions of school climate: The effect of classroom-level factors. *Journal of Educational Psychology, 100*, 96-104.
- Kozleski, E. B., & Huber, J. J. (2010). Systematic change for RTI: Key shifts for practice. *Theory Into Practice, 49*, 258-264.
- Kuperminc, G. P., Leadbeater, B. J., & Blatt, S. J. (2001). School social climate and individual differences in vulnerability to psychopathology among middle school students. *Journal of School Psychology, 39*, 141-159.
- Kuperminc, G. P., Leadbeater, B. J., Emmons, C., & Blatt, S. J. (1997). Perceived school climate and difficulties in the social adjustment of middle school students. *Applied Developmental Science, 1*, 76-88.

- Larson, R. J., & Ketelaar, T. (1991). Personality and susceptibility to positive and negative emotional states. *Journal of Personality and Social Psychology*, *61*, 132-140.
- Lawler, E. E., & Porter, L. W. (1967). The effect of performance on job satisfaction. *Industrial Relations*, *7*, 20-28.
- Lester, D. (1987). Correlates of job satisfaction in police officers. *Psychological Reports*, *60*, 550.
- Locke, E. A. (1961). What is job satisfaction? *Organizational behavior and human performance*, *4*, 309-336. Academic Press, Inc.
- Locke, E. A. (1976) page 282 in Brief, A.P., & Weiss, H.M. (2001). Organizational behavior: affect in the workplace. *Annual Review of Psychology*, *53*, 279-307.
- Lucas, G. H., Babakus, E., & Ingram, T. N. (1990). An empirical test of the job satisfaction turnover relationship: Assessing the role of job performance of retail managers. *Journal of the Academy of Marketing Science*, *18*, 199-208.
- Manz, P. H., Mautone, J. A., Martin, S. D. (2009). School psychologists' collaborations with families: An exploratory study of the interrelationships of their perceptions of professional efficacy and school climate and demographic and training variables. *Journal of Applied School Psychology*, *25*, 47-70.
- Maslach, C., Schaufel, W. B., & Leiter, M. P. (2001). Job burnout. *Annual Review of Psychology*, *52*, 397-422.
- McDonald, J.H. (2009). Spearman rank correlation. In *Handbook of Biological Statistics (2<sup>nd</sup> ed)*. (pp 221-223). Baltimore, MD: Sparky House Publishing. Available online: <http://udel.edu/~mcdonald/statspearman.html>

- Meier, U. (2006). A note on the power of Fisher's least significant difference procedure. *Pharmaceutical Statistics, 5*, 253-263.
- Moore, H. (1941). Employee attitude surveys. *The Personnel Journal, 19*, 360-363.
- National Science Foundation. (2005). Women, minorities, and persons with disabilities in science and engineering. Retrieved May 22, 2011, from <http://www.nsf.gov/statistics/wmpd/2008-05/pdf/tabc-12.pdf>
- O'Reilly, C. A. & Chatman, J. A. (1996). Culture as social control: Corporations, cults and commitment. *Research in Organizational Behavior, 18*, 157-200.
- Organ, D., & Greene, C. (1974). Role ambiguity, locus of control and work satisfaction, *Journal of Applied Psychology, 59*, 101-102.
- Pearson, L. C., & Moomaw, W. (2005). The relationship between teacher autonomy and stress, work satisfaction, empowerment, and professionalism. *Educational Research Quarterly, 29*, 38-54.
- Pepper, K. & Thomas, L. (2001). Making a change: The effects of the leadership role on school climate. *Learning Environments Research, 5*, 155-166.
- Pierce, J. L., Jussila, I., & Cummings, A. (2009). Psychological ownership within the job design context: revision of the job characteristics model. *Journal of Organizational Behavior, 30* (4), 477-496.
- Poffenberger, A. T. (1927). The effects of continuous mental work. *American Journal of Psychology, 39*, 283-296.
- Poffenberger, A. T. (1928). The effects of continuous work upon output and feelings. *Journal of Applied Psychology, 12*, 459-476.

- Poncy, B. C., McCallum, E., & Skinner, C. H. (2011). Advocating for effective instruction: School Psychologists as an instructional leader. In T. M. Lionetti, E. P. Snyder, & R. W. Christner (Eds.), *A Practical Guide to Building Professional Competencies in School Psychology* (pp. 155-173). Springer Science and Business Media, US.
- Puvada, D. D. & Gudivada, V. R. (2012). Performance and job satisfaction: a critical analysis. *Business Administration and Business Economics*, 8, 5-17.
- Reschly, D. J., & Connolly, L. M. (1990). Comparisons of school psychologists in the city and country: Is there a 'rural' school psychology? *School Psychology Review*, 19(4), 534-560.
- Reschly, D. J., & Ysseldyke, J. E. (2002). Paradigm shift: The past is not the future. In A. Thomas & J. Grimes (Eds.), *Best practices in school psychology*. (4th ed., pp. 3-20). Bethesda, MD: National Association of School Psychologists.
- Reynolds, C. R., & Gutkin, T. B. (1999). *The handbook of school psychology* (3<sup>rd</sup> ed.). New York: Wiley.
- Richford, M., & Fortune, J. (1984). The secondary principal's job satisfaction in relation to two personality constructs. *Education*, 105, 17-20.
- Riggle, R. J., Edmondson, D. R., & Hansen, J. D. (2009). A meta-analysis of the relationship between perceived organizational support and job outcomes: 20 years of research. *Journal of Business Research*, 62(10), 1027-1030.
- Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs*, 80 (1, whole no. 609)
- Rotter, J. B. (1990). Internal versus external control of reinforcement: A case history of a variable. *American Psychologist*, 45, 489-493.

- Schyns, B., VanVeldhoven, M., & Wood, S. (2009). Organizational climate, relative psychological climate and job satisfaction: The example of supportive leadership climate. *Leadership and Organization Development Journal*, 30 (7), 649-663.
- Section 504 of the Rehabilitation Act, 29 U.S.C. §794 (2006).
- Shepard, G. H. (1928). Effect of rest periods on production. *The Personnel Journal*, 7, 186-202.
- Sheridan, S. M., & Gutkin, T. B. (2000). The ecology of school psychology: Examining and changing our paradigm for the 21<sup>st</sup> century. *School Psychology Reviews*, 29, 485-502.
- Sherman, S. J. & Fazio, R. H. (1983). Parallels between attitudes and traits as predictors of behavior. *Journal of Personality*, 51, 308-345.
- Skaalvik, E. M. & Skaalvik, S. (2011). Teacher job satisfaction and motivation to leave the teaching profession: relations with school context, feeling of belonging and emotional exhaustion. *Teaching and Teacher Education*, 27(6), 1029-1038.
- Skaalvik, E. M. & Skaalvik, S. (2009). Does school context matter? Regulations with teacher burnout and job satisfaction. *Teaching and Teacher Education*, 25, 518-524.
- Smith, D. & Cranny, F. (1968). Job satisfaction, effort, and commitment. *Journal of Business Management*, 123(3), 151-164.
- Spector, P. E. (1985). Measurement of human staff satisfaction: development of the job satisfaction survey. *American Journal of Community Psychology*, 8, 455-461.
- Spector, P. E. (1997). *Job satisfaction: Application, assessment, causes, and consequence*. Thousand Oaks, CA: Sage.
- Spring, J. (2006). *American Education* (twelfth edition). New York, NY: McGraw Hill.
- Super, D. E. (1939). Occupational level and job satisfaction. *Journal of Applied Psychology*, 23, 547-564.

- Tabachnick, B.G. & Fidell, L.S. (2007). *Using multivariate statistics (5<sup>th</sup> edition)*. Boston, MA: Allyn and Bacon.
- Tandon, J. K. & Tyagi, P. (2012). The concept of job satisfaction and its organizational implications. *Educational Quest*, 3(1), 57-66.
- Taylor, D. L., & Tashakkori, A. (1995). Decision participation and school climate as predictors of job satisfaction and teacher's sense of efficacy. *Journal of Experimental Education*, 63, 217-227.
- Tsai, M. T., & Huang, C. C. (2008). The relationship among ethical climate types, facts of job satisfaction and the three components of organizational commitment. *Journal of Business Ethics*, 80, 565-581.
- VanVoorhis, R. W. & Levinson, E. M. (2006). Job satisfaction among school psychologists: A meta-analysis. *School Psychology Quarterly*, 21, 77-90.
- Wang, G. & Lee, P. D. (2009). Psychological empowerment and job satisfaction: An analysis of interactive effects. *Group Organization Management*, 34, 271-296.
- Wanous, J. P., & Lawler, E. E. (1972). Measurement and meaning of job satisfaction. *Journal of Applied Psychology*, 56, 95-105.
- Warr, P. & Inceoglu, I. (2012). Job engagement, job satisfaction, and contrasting associations with person-job fit. *Journal of Occupational Health Psychology*, 17(2), 129-138.
- Watson, G., & Seidman, J. M. (1941). Dissatisfactions in work. *Journal of Social Psychology*, 13, 183-186.
- Weaver, C. N. (1980). Job satisfaction in the United States in the 1970s. *Journal of Applied Psychology*, 65, 364-367.

- Weiss, D. J., Dawis, R. V., England, G. W., & Lofquist, L. H. (1967). *Manual for the Minnesota Satisfaction Questionnaire* (Minneapolis MN: The University of Minnesota Press).
- Wernimont, P.F. (1966). Intrinsic and extrinsic factors in job satisfaction. *Journal of Applied Psychology, 50*, 41-50.
- Williams, E. S., Konrad, T. R., Scheckler, W. E., Pathman, D. E., Linzer, M., McMurray, J. E., Gerrity, M. & Schwartz, M. (2012). Understanding physicians' intentions to withdraw from practice: the role of job satisfaction, job stress, mental and physical health. *Health Care Management Review, 35*(2), 105-115.
- Williams, K. J., Williams, G. M., & Ryer, J. A. (1990). The relation between performance feedback and job attitudes among school psychologists. *School Psychology Review, 19*, 550-563.
- Zirkel, P. A. (2011). Does section 504 require a section 504 plan for each eligible non-IDEA student? *JL & Education, 40*, 407.
- Zirkel, P. A. (2010). Section 504: Student Eligibility Update. *The Clearing House: A Journal of Educational Issues and Ideas, 82*, 209-211.
- Zirkel, P. A., & Thomas, L. B. (2011). State laws for RTI: An updated snapshot. *Teaching Exceptional Children, 42*, 56-63.

## Tables

*Table 1*

*Demographic Characteristics of the Sample*

<i>Variable</i>	<i>n</i>	<i>%</i>	<i>M (SD)</i>	<i>Range</i>
<b>Gender</b>				
Male	23	14.8		
Female	132	85.2		
<b>Age</b>				
			39.42 (11.95)	25-78
25-29	45	29.0		
30-39	44	28.4		
40-49	32	20.6		
50-59	23	14.8		
60-69	10	6.5		
70-79	1	0.6		
<b>Degree Level</b>				
Masters/Specialist	110	71.0		
Doctoral Degree	33	21.3		
Masters/Specialist with Doctoral Degree in Progress	12	7.7		
<b>Location</b>				
Urban	34	21.9		
Suburban	76	49.0		
Rural	45	29.0		
<b>Years in Occupation</b>				
			11.09 (9.61)	1 – 47
1-5	60	38.7		
6-10	30	19.4		
11-15	23	14.8		
16-20	20	12.9		
21+	22	14.2		
<b>Years at Present School</b>				
			7.81 (7.28)	0 – 37
0-2	40	25.8		
3-5	37	23.9		
6-10	38	24.5		
11-15	17	11.0		
16+	23	14.8		

*Table 2 - U.S. Regions and States of Respondents*

State	N	%	n	%
Region 1 - Northeast	76	49.0		
New Hampshire			1	0.6
New Jersey			39	25.2
New York			34	21.9
Pennsylvania			1	0.6
Vermont			1	0.6
Region 2 - Midwest	8	5.2		
Illinois			1	0.6
North Dakota			6	3.9
Ohio			1	0.6
Region 3 - South	66	42.6		
Delaware			13	8.4
Kentucky			42	27.1
Maryland			11	7.1
Region 4 - West	5	3.2		
California			5	3.2

Table 3

*Grades Worked With in Current Position*

Grade	n	%
K	108	69.7
1	107	69.0
2	108	69.7
3	111	71.6
4	111	71.6
5	112	72.3
6	89	57.4
7	84	54.2
8	84	54.2
9	76	49.0
10	75	48.4
11	75	48.4
12	73	47.1
Adult Education	8	5.2
Other	42	27.1
Early Childhood / Pre-K	39	25.2
Other	5	3.2

Table 4

*Expectations and Desire to Leave Job/Profession*

Item	Mean (SD)	Median	Distribution of Responses				
			<i>Much less (1)</i>	<i>Somewhat less (2)</i>	<i>About the same (3)</i>	<i>Somewhat more (4)</i>	<i>Much more (5)</i>
Role as a school psychologist meets expectations	3.15 (1.12)	3.0	11 (7.1%)	32 (20.6%)	55 (35.5%)	36 (23.2%)	21 (13.5%)
			<i>Very high (1)</i>	<i>High (2)</i>	<i>Moderate (3)</i>	<i>Low (4)</i>	<i>Very low (5)</i>
Desire to leave current job in next 5 years	3.18 (1.35)	3.0	25 (16.1%)	23 (14.8%)	37 (23.9%)	39 (25.2%)	31 (20.0%)
Desire to leave profession of school psychology in next 5 years	3.81 (1.25)	4.0	11 (7.1%)	14 (9.0%)	29 (18.7%)	40 (25.8%)	61 (39.4%)

Table 5

*Descriptive statistics for Minnesota Satisfaction Questionnaire – short form (MSQ-sf)*

	Overall Scale	IS Subscale	ES Subscale
Mean	3.66	3.89	3.17
SD	0.53	0.55	0.75
Minimum	1.70	1.58	1.33
Maximum	4.85	5.00	5.00
Skewness ( <i>SE</i> = .195)	-.687	-1.002	-.234
Kurtosis ( <i>SE</i> = .387)	.825	2.101	-.449

Note. Overall = overall job satisfaction (20 items), IS = intrinsic satisfaction (12 items), ES = extrinsic satisfaction (6 items), *SE* = standard error. The possible range of scores is from 1 to 5, with higher scores indicating higher job satisfaction.

Table 6

*Descriptive statistics for School Climate Survey (SCS) Subscales and Overall Scale*

	<i>N</i>	<i>M</i>	<i>SD</i>	Minimu m	Maximu m	Skewness ( <i>SE</i> = .195)	Kurtosis ( <i>SE</i> = .387)
Achievement	154	4.03	.55	2.40	5.00	-.697	1.096
Motivation							
Collaborative	155	3.60	.66	1.40	5.00	-.716	.240
Decision Making							
Equity and Fairness	155	4.11	.62	2.00	5.00	-.512	.537
Leadership	154	3.88	.80	1.14	5.00	-1.092	1.673
Order and Discipline	155	3.67	.75	1.33	5.00	-.854	.687
School Building	154	4.24	.69	1.60	5.00	-1.376	2.701
School Parent	154	3.51	.81	1.00	5.00	-.479	.268
Community Relations							
Staff Dedication to	155	3.92	.62	2.00	5.00	-1.094	1.653
Learning							
Staff Expectations	155	3.89	.87	1.17	5.00	-.830	.404
SCS Scale	151	3.85	.54	1.80	4.83	-.753	1.186

*Note.* *SE* = standard error. The possible range of scores is between 1 and 5, with higher scores indicating more positive views of the school climate.

Table 7

*Descriptive statistics for Rotter's Internal-External Locus of Control Scale (LOC scale)*

	LOC Scale
Mean	8.15
SD	3.73
Minimum	0
Maximum	19
Skewness (se = .195)	0.279
Kurtosis (se = .387)	0.004

*Note.* Possible range of scores is from 0 to 23. Higher scores indicate more external locus of control.

Table 8

Relationships between select demographic variables and job satisfaction (MSQ-sf)

Variable	<i>n</i>	Mean	SD	Statistical Comparison
Gender				$t(152) = 0.536, p = .593$
Male	23	3.72	0.56	
Female	131	3.66	0.50	
Age	154			$r(152) = .299, p < .001$
Degree Level				$F(2,151) = 2.517, p = .084$
Masters/Specialist	109	3.65	0.50	
Doctoral Degree	33	3.82	0.50	
Masters/Specialist with Doctoral Degree in Progress	12	3.46	0.54	
Location Type				$F(2,151) = 2.541, p = .082$
Urban	34	3.50	0.55	
Suburban	75	3.72	0.48	
Rural	45	3.72	0.52	
Years in Occupation	154			$r(152) = .317, p < .001$
Career Expectation Met	154			$\rho(152) = .590, p < .001$

*Note.* The relationships between the MSQ-sf total score and demographic variables were analyzed using the t-test for binary nominal variables (gender), one-way ANOVA for multinomial variables (degree level, location), Spearman's rho for ordinal variables (career expectation), and Pearson's correlation for ratio variables (age, years in occupation). Career expectation was coded such that higher scores indicated more positive concordance between expectations and career.

Table 9

*Relationships between select demographic variables and school climate (SCS scale)*

<i>Variable</i>	<i>n</i>	<i>Mean</i>	<i>SD</i>	<i>Statistical Comparison</i>
Gender				$t(148) = 1.819, p = .071$
Male	23	4.04	0.46	
Female	127	3.83	0.52	
Age	150			$r(148) = .312, p < .001$
Degree Level				$F(2,147) = 2.109, p = .125$
Masters/Specialist	109	3.81	0.53	
Doctoral Degree	33	4.02	0.49	
Masters/Specialist with Doctoral Degree in Progress	12	3.94	0.41	
Location Type				$F(2,147) = 10.552, p < .001$
Urban <sup>a</sup>	32	3.56	0.60	LSD Post hoc: $b > c > a$
Suburban <sup>b</sup>	73	4.02	0.43	
Rural <sup>c</sup>	45	3.83	0.48	
Years in Occupation	150			$r(148) = .395, p < .001$
Career Expectation	150			$\rho(148) = .358, p < .001$

*Note.* The relationship between the SCS total score and demographic variables was analyzed using the t-test for binary nominal variables (gender), one-way ANOVA for multinomial variables (degree level, location), Spearman's rho for ordinal variables (career expectation), and Pearson's correlation for ratio variables (age, years in occupation). Career expectation was coded such that higher scores indicated more positive concordance between expectations and career. Post-hoc comparisons were conducted using Tukey's Least Significant Difference (LSD) Test (no correction).

Table 10

Relationships between select demographic variables and locus of control scale (LOC scale)

Variable	<i>n</i>	Mean	SD	Statistical Comparison
Gender				$t(153) = -0.699, p = .486$
Male	23	7.65	3.94	
Female	132	8.24	3.70	
Age	155			$r(153) = -.218, p = .007$
Degree Level				$F(2,152) = 0.727, p = .485$
Masters/Specialist	110	8.25	3.58	
Doctoral Degree	33	7.55	4.02	
Masters/Specialist with Doctoral Degree in Progress	12	8.92	4.36	
Location Type				$F(2,152) = 2.173, p = .117$
Urban	34	9.32	4.00	
Suburban	76	7.80	3.67	
Rural	45	7.87	3.53	
Years in Occupation	155			$r(153) = -.216, p = .007$
Career Expectation	155			$\rho(153) = -.173, p = .031$

Note. The relationship between the LOC scale total score and demographic variables was analyzed using the t-test for binary nominal variables (gender), one-way ANOVA for multinomial variables (degree level, location), Spearman's rho for ordinal variables (career expectation), and Pearson's correlation for ratio variables (age, years in occupation). Career expectation was coded such that higher scores indicated greater satisfaction.

Table 11

Pearson correlation coefficients between MSQ scale and SCS subscales

	MSQ	AM	CDM	EF	Lead	OD	SB	SPCR	SDL	SE
MSQ	1	.422***	.385***	.332***	.384***	.422***	.344***	.474***	.423***	.410***
AM		1	.257**	.332***	.408***	.766***	.488***	.577***	.566***	.620***
CDM			1	.480***	.528***	.221**	.328***	.437***	.423***	.301***
EF				1	.447***	.336***	.366***	.301***	.637***	.369***
Lead					1	.497***	.332***	.360***	.480***	.409***
OD						1	.561***	.604***	.520***	.633***
SB							1	.483***	.389***	.388***
SPCR								1	.477***	.600***
SDL									1	.557***

Note.  $N = 149$ . MSQ = Minnesota Satisfaction Questionnaire (short-form), SCS = School Climate Survey, AM = Achievement Motivation, CDM = Collaborative Decision Making, EF = Equity & Fairness, Lead = Leadership, OD = Order and Discipline, SB = School Building, SPCR = School Parent Community Relations, SDL = Staff Dedication to Learning, SE = Staff Expectations.

\*\*  $p < .01$ , \*\*\*  $p < .001$ .

Table 12

*Simultaneous Regression Analysis Predicting Job Satisfaction (MSQ-Sf) from SCS Subscales*

Variable	<i>B</i>	<i>SE B</i>	$\beta$	<i>t</i>	<i>p</i>
(Constant)	1.492	.344		4.336	.000
Achievement	.080	.113	.083	.707	.480
Motivation					
Collaborative	.109	.077	.136	1.420	.158
Decision					
Making					
Equity and	.025	.080	.031	.316	.753
Fairness					
Leadership	.059	.063	.089	.935	.352
Order and	.037	.091	.053	.406	.686
Discipline					
School	.026	.067	.035	.393	.695
Building					
School Parent	.132	.067	.203	1.970	.051
Community					
Relations					
Staff	.076	.092	.090	.835	.405
Dedication to					
Learning					
Staff	.030	.062	.050	.486	.628
Expectations					

*Note.*  $N = 149$ . Regression  $F(9,139) = 7.316, p < .001, R^2 = .321, \text{Adj. } R^2 = .277$ . *SE* = Standard error.

Table 13

Stepwise Regression Analysis Predicting Job Satisfaction (MSQ-Sf) from SCS Subscales, in Test sample ( $n = 109$ )

Variable	<i>B</i>	<i>SE B</i>	$\beta$	<i>t</i>	<i>p</i>
(Constant)	1.917	.271		7.081	.000
School Parent Community Relations	.310	.061	.434	5.081	.000
Collaborative Decision Making	.186	.067	.238	2.785	.006

Note.  $N = 149$ . Test sample: Regression  $F(2,106) = 24.248$ ,  $p < .001$ ,  $R = .560$ ,  $R^2 = .314$ , Adj.  $R^2 = .301$ . *SE* = Standard error. School Parent Community Relations entered on Step 1, Collaborative Decision Making on Step 2. Correlation between predicted and actual scores in cross-validation sample ( $n = 40$ ):  $r = .409$  ( $R^2 = .167$ ).

Table 14

*Pearson Correlations between MSQ, SCS, and LOC scales*

	MSQ	SCS	LOC
MSQ	1	.554 <sup>***</sup>	-.291 <sup>***</sup>
SCS	.554 <sup>***</sup>	1	-.280 <sup>***</sup>
LOC	-.291 <sup>***</sup>	-.280 <sup>***</sup>	1

*Note.*  $N = 149$ . MSQ = Minnesota Satisfaction Questionnaire (short-form), SCS = School Climate Survey, LOC = Locus of Control I-E Scale.

\*\*  $p < .01$ , \*\*\*  $p < .001$ .

Table 15

Multiple Regression Analysis Predicting Job Satisfaction (MSQ-Sf) from SCS and LOC scales

Variable	<i>B</i>	<i>SE B</i>	$\beta$	<i>t</i>	<i>p</i>
(Constant)	1.869	.306		6.118	.000
SCS scale	.510	.070	.513	7.256	.000
LOC scale	-.020	.010	-.148	-2.088	.039

Note.  $N = 149$ . Regression  $F(2,146) = 35.539, p < .001, R^2 = .327, \text{Adj. } R^2 = .318$ . *SE* = Standard error. MSQ = Minnesota Satisfaction Questionnaire (short-form), SCS = School Climate Survey, LOC = Locus of Control I-E Scale.

Table 16

*Hierarchical Regression Analysis Predicting Job Satisfaction (MSQ-Sf) from SCS and LOC scales, after Controlling for Years in Occupation*

Variable	<i>B</i>	<i>SE B</i>	$\beta$	<i>t</i>	<i>p</i>	Zero-order Corr.	Partial Corr.	Semi- Partial Corr.
Step 1								
(Constant)	3.480	.061		57.195	.000			
Years in occupation	.018	.004	.336	4.323	.000	.336	.336	.336
Step 2								
(Constant)	1.931	.307		6.291	.000			
Years in occupation	.006	.004	.113	1.514	.132	.336	.125	.102
SCS scale	.471	.075	.474	6.318	.000	.554	.465	.427
LOC scale	-.018	.010	-.127	-1.779	.077	-.291	-.146	-.120

*Note.*  $N = 149$ . Step 1: Regression  $F(1,147) = 18.690, p < .001, R^2 = .113, \text{Adj. } R^2 = .107$ . Step 2: Regression  $F(3,145) = 24.667, p < .001, R^2 = .338, \text{Adj. } R^2 = .324, \Delta R^2 = .225, p < .001$ . *SE* = Standard error. MSQ = Minnesota Satisfaction Questionnaire (short-form), SCS = School Climate Survey, LOC = Locus of Control I-E Scale.

Table 17

*Hierarchical Regression Analysis Predicting Job Satisfaction (MSQ-Sf) from SCS and LOC scales, and their interaction*

Variable	<i>B</i>	<i>SE B</i>	$\beta$	<i>t</i>	<i>p</i>
Step 1					
(Constant)	3.679	.035		105.435	.000
SCS scale ( <i>M Ctr</i> )	.510	.070	.513	7.256	.000
LOC scale ( <i>M Ctr</i> )	-.020	.010	-.148	-2.088	.039
Step 2					
(Constant)	3.678	.036		101.262	.000
SCS scale ( <i>M Ctr</i> )	.510	.071	.513	7.231	.000
LOC scale ( <i>M Ctr</i> )	-.021	.010	-.148	-2.067	.040
SCS * LOC ( <i>M Ctr</i> )	-.001	.018	-.004	-.065	.948

*Note.*  $N = 149$ . Step 1: Regression  $F(2,146) = 35.539, p < .001, R^2 = .327, \text{Adj. } R^2 = .318$ . Step 2: Regression  $F(3,145) = 23.532, p < .001, R^2 = .327, \text{Adj. } R^2 = .314. \Delta R^2 = .000, p = .948$ . *SE* = Standard error. MSQ = Minnesota Satisfaction Questionnaire (short-form), SCS = School Climate Survey, LOC = Locus of Control I-E Scale. SCS and LOC were mean-centered prior to analysis.

Table 18

Conditional effect of SCS scale on MSQ scale, at three different values of LOC scale

LOC Total	<i>B</i>	<i>SE B</i>	<i>t</i>	<i>p</i>	95% <i>CI B</i>	
					<i>Lower</i>	<i>Upper</i>
-1SD (-3.73)	.515	.097	5.294	.000	.323	.707
Mean	.510	.071	7.231	.000	.371	.650
+1SD (+3.73)	.506	.098	5.190	.000	.313	.699

Note. MSQ = Minnesota Satisfaction Questionnaire (short-form), SCS = School Climate Survey, LOC = Locus of Control I-E Scale.

Table 19

*Hierarchical Regression Analysis Predicting Job Satisfaction (MSQ-Sf) from SCS and LOC scales, and their interaction, after controlling for years in occupation*

Variable	<i>B</i>	<i>SE B</i>	$\beta$	<i>t</i>	<i>p</i>
Step 1					
(Constant)	3.480	.061		57.195	.000
Years in occupation	.018	.004	.336	4.323	.000
Step 2					
(Constant)	3.612	.056		64.199	.000
Years in occupation	.006	.004	.113	1.514	.132
SCS scale ( <i>M Ctr</i> )	.471	.075	.474	6.318	.000
LOC scale ( <i>M Ctr</i> )	-.018	.010	-.127	-1.779	.077
Step 3					
(Constant)	3.612	.057		63.734	.000
Years in occupation	.006	.004	.114	1.510	.133
SCS scale ( <i>M Ctr</i> )	.471	.075	.474	6.290	.000
LOC scale ( <i>M Ctr</i> )	-.017	.010	-.126	-1.732	.085
SCS * LOC ( <i>M Ctr</i> )	.002	.018	.006	.092	.927

*Note.*  $N = 149$ . Step 1: Regression  $F(1,147) = 18.690, p < .001, R^2 = .113, \text{Adj. } R^2 = .107$ . Step 2: Regression  $F(3,145) = 24.667, p < .001, R^2 = .338, \text{Adj. } R^2 = .324, \Delta R^2 = .225, p < .001$ . Step 3: Regression  $F(4,144) = 18.376, p < .001, R^2 = .338, \text{Adj. } R^2 = .320, \Delta R^2 = .000, p = .927$ . *SE* = Standard error. MSQ = Minnesota Satisfaction Questionnaire (short-form), SCS = School Climate Survey, LOC = Locus of Control I-E Scale. SCS and LOC were mean-centered prior to analysis.

## Figures

Figure 1. Distribution histogram of scores on MSQ-sf scale.

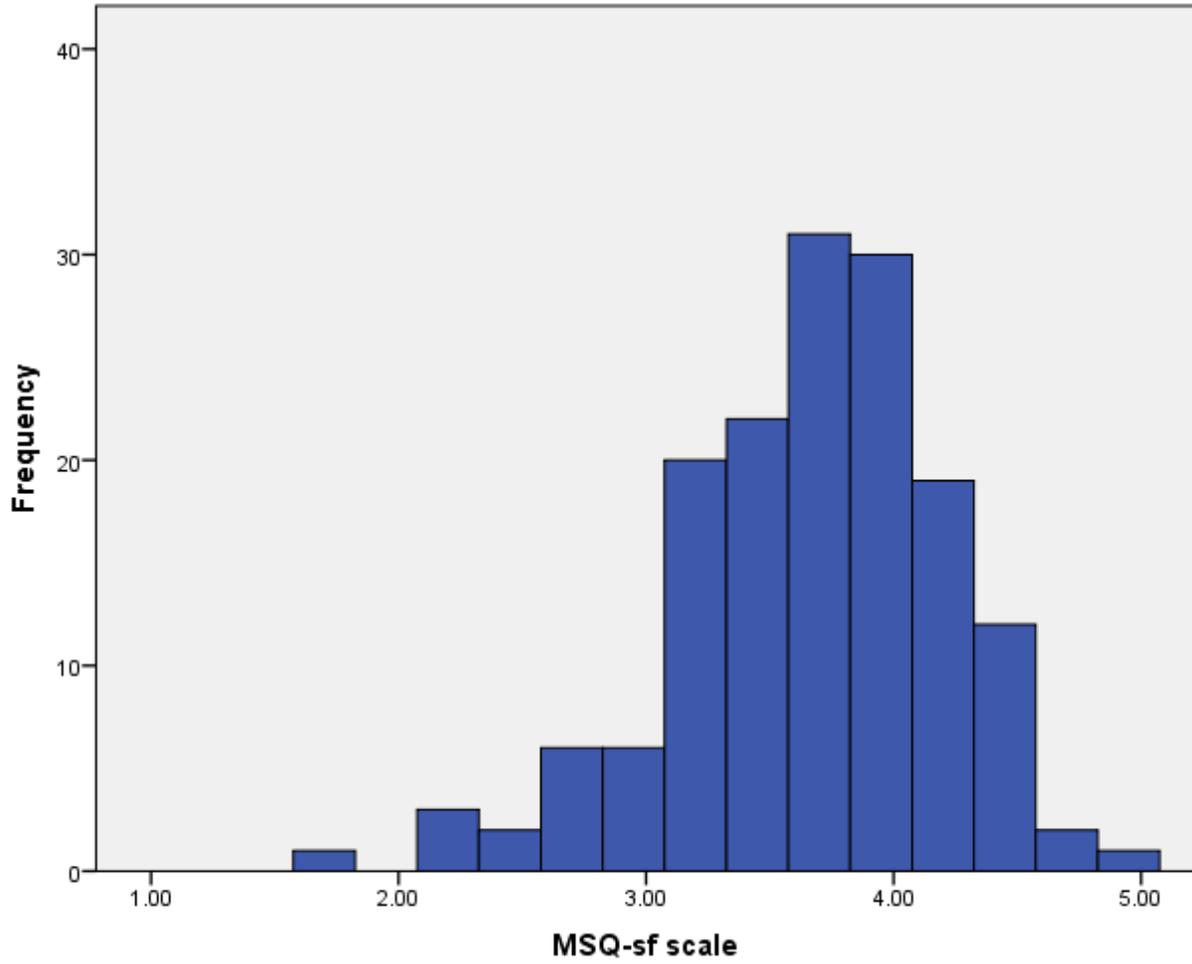


Figure 2. Distribution histogram of scores on SCS scale.

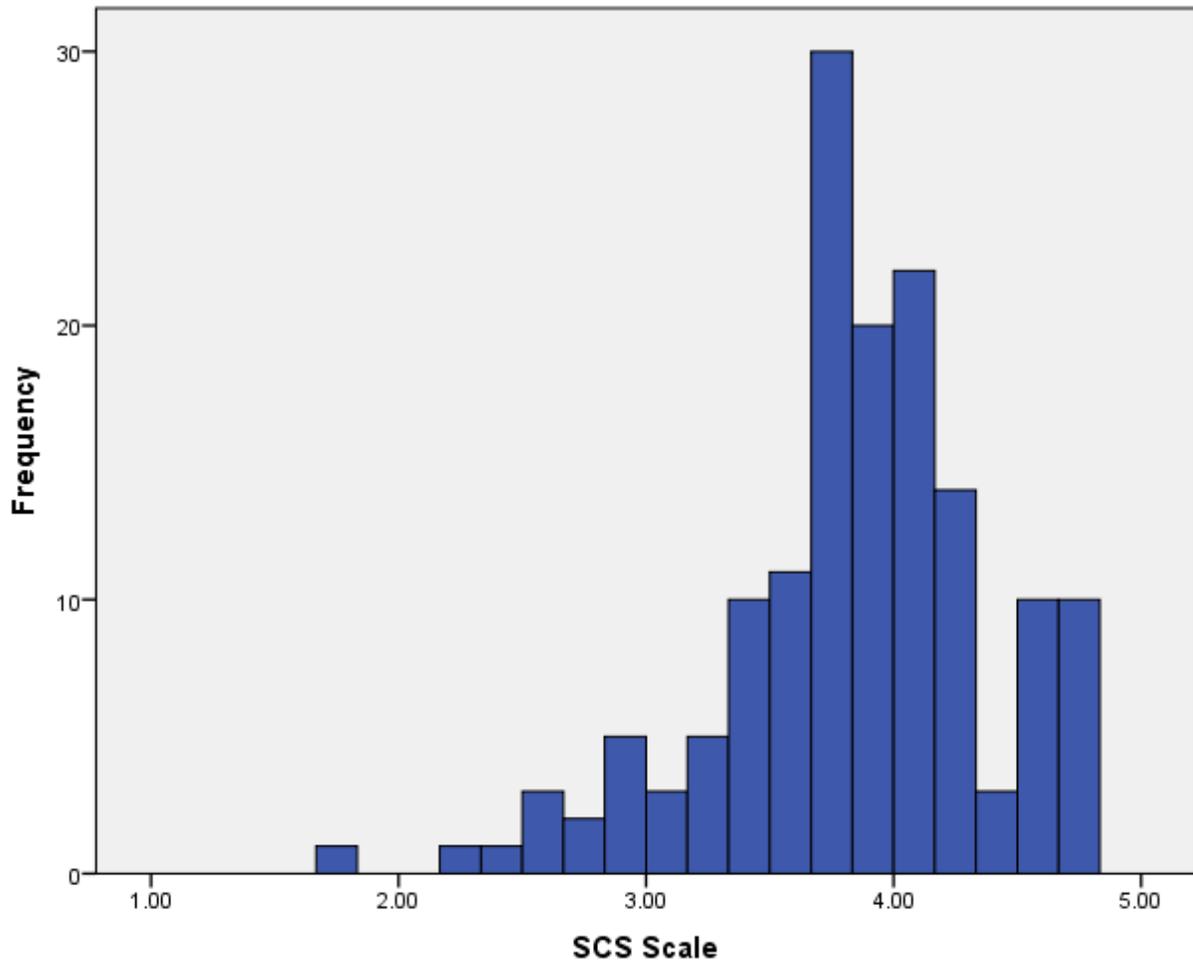


Figure 3. Distribution histogram of scores on I-E LOC scale.

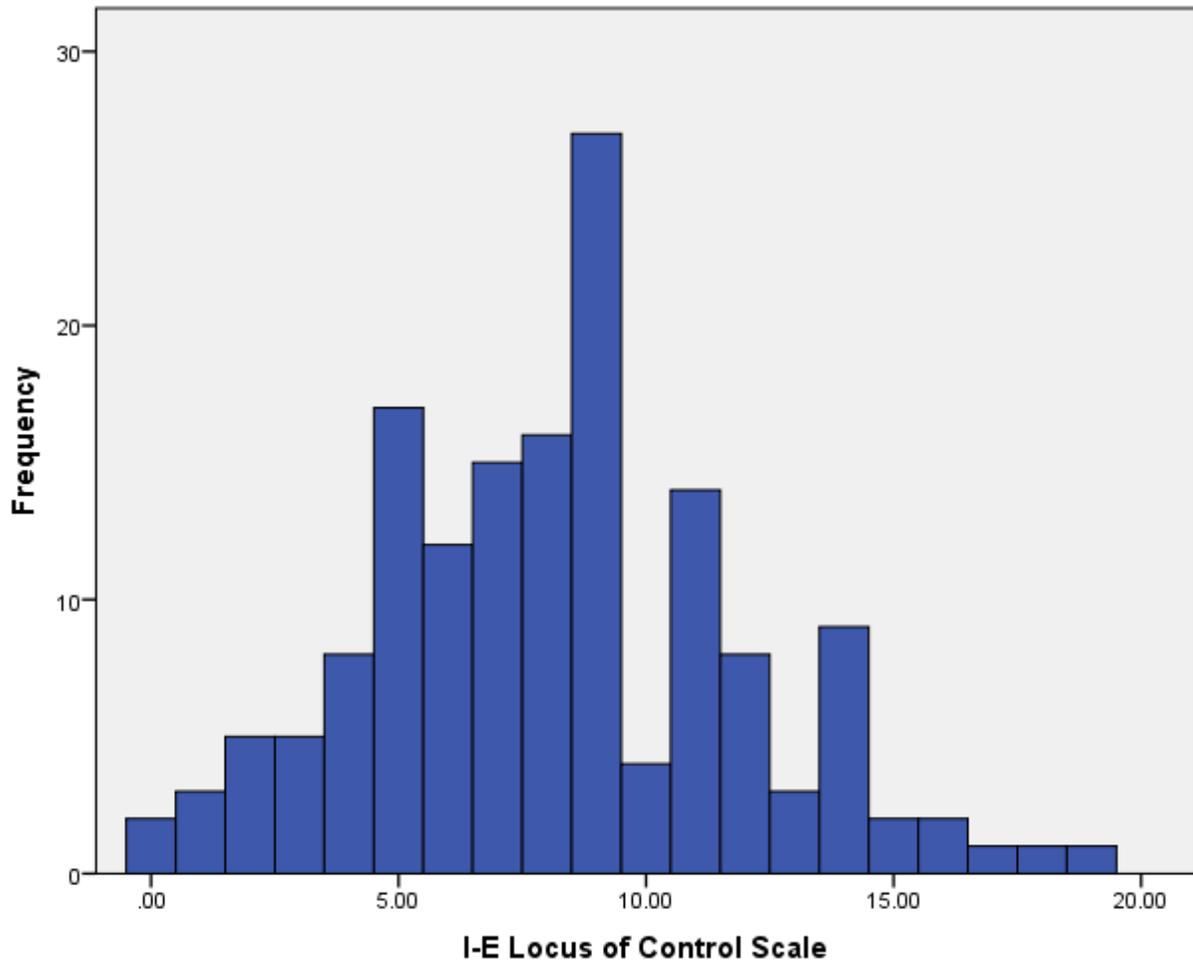


Figure 4. Scatterplot between MSQ scale scores and age in years.

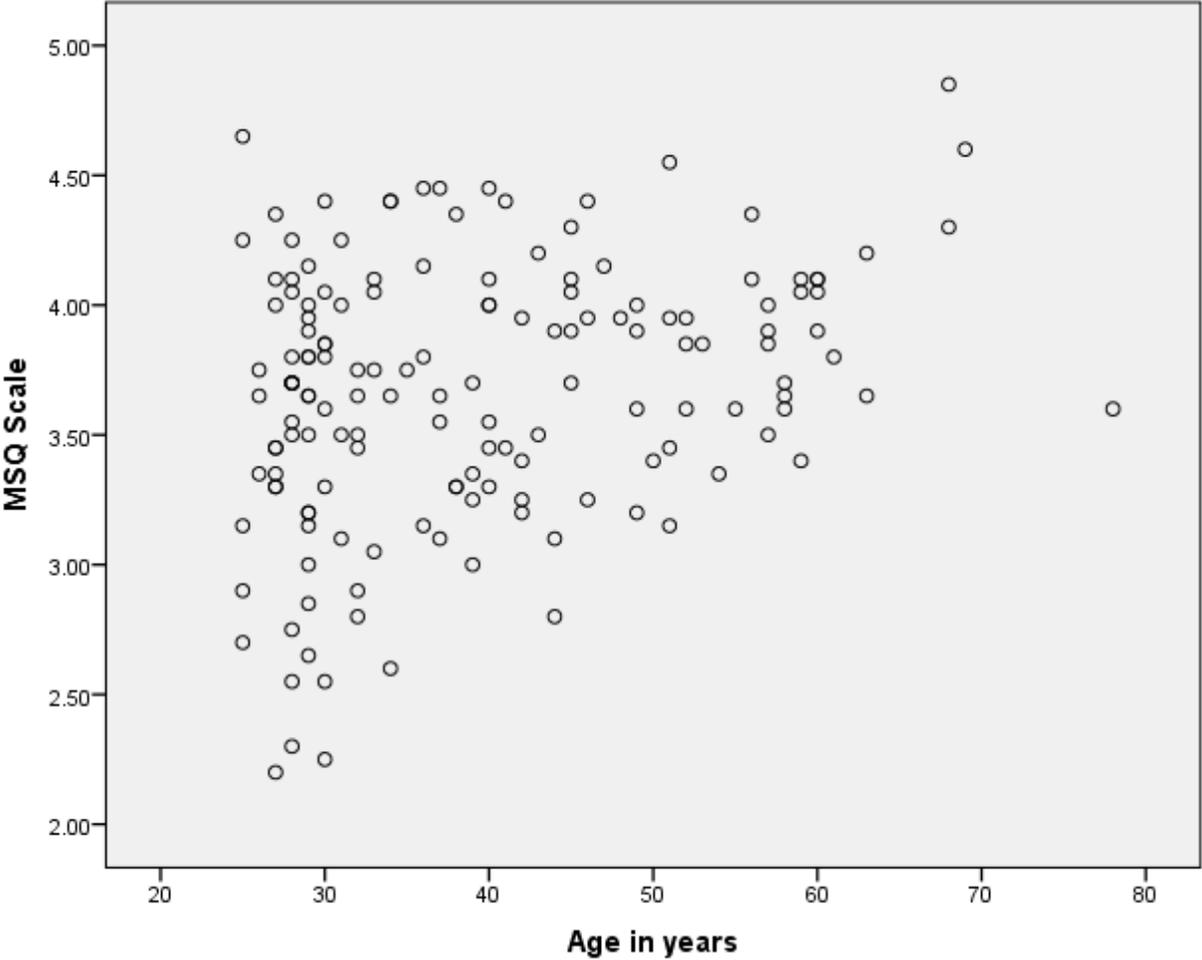


Figure 5. Scatterplot between MSQ scale scores and years in occupation.

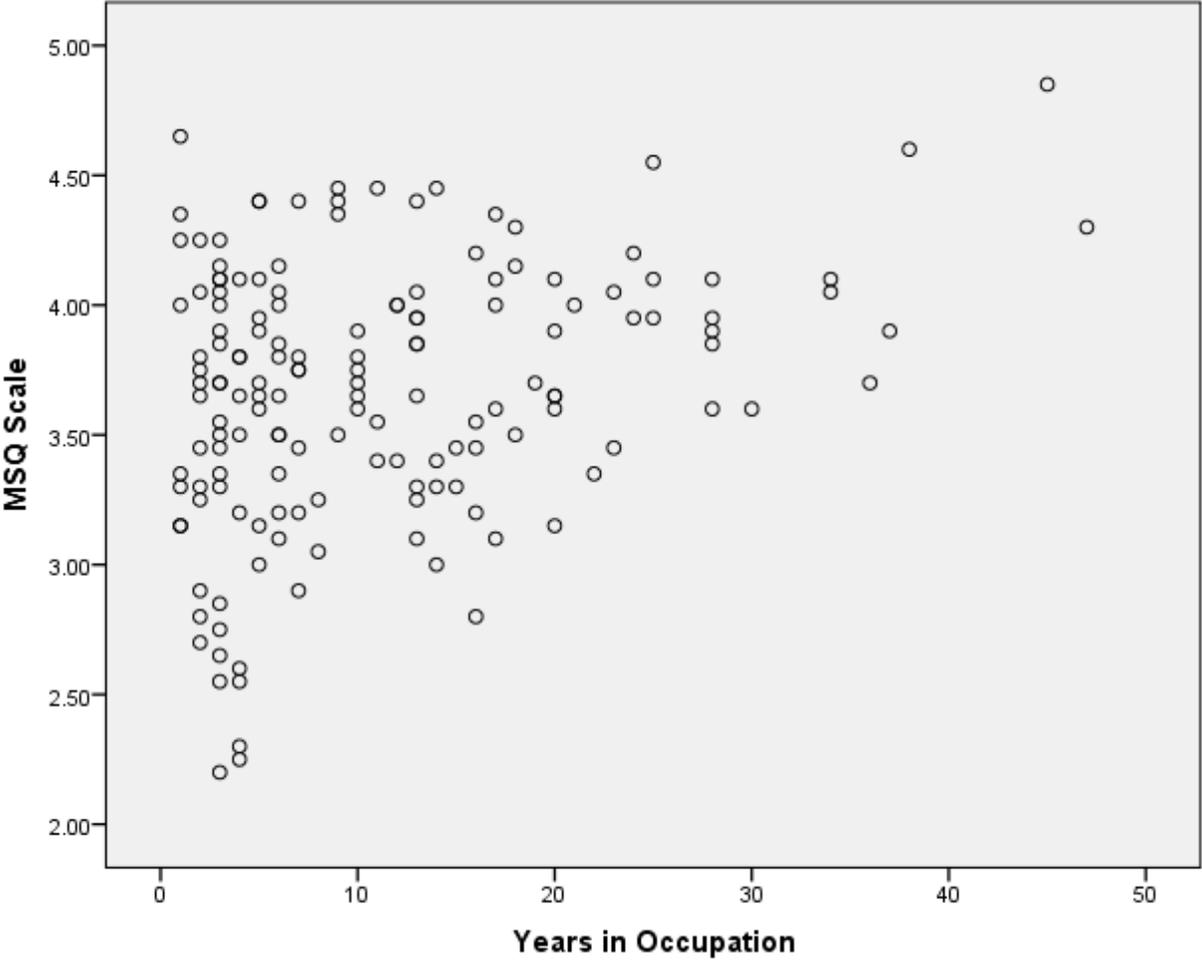


Figure 6. Bar chart showing mean MSQ scale scores according to level of career expectation met.

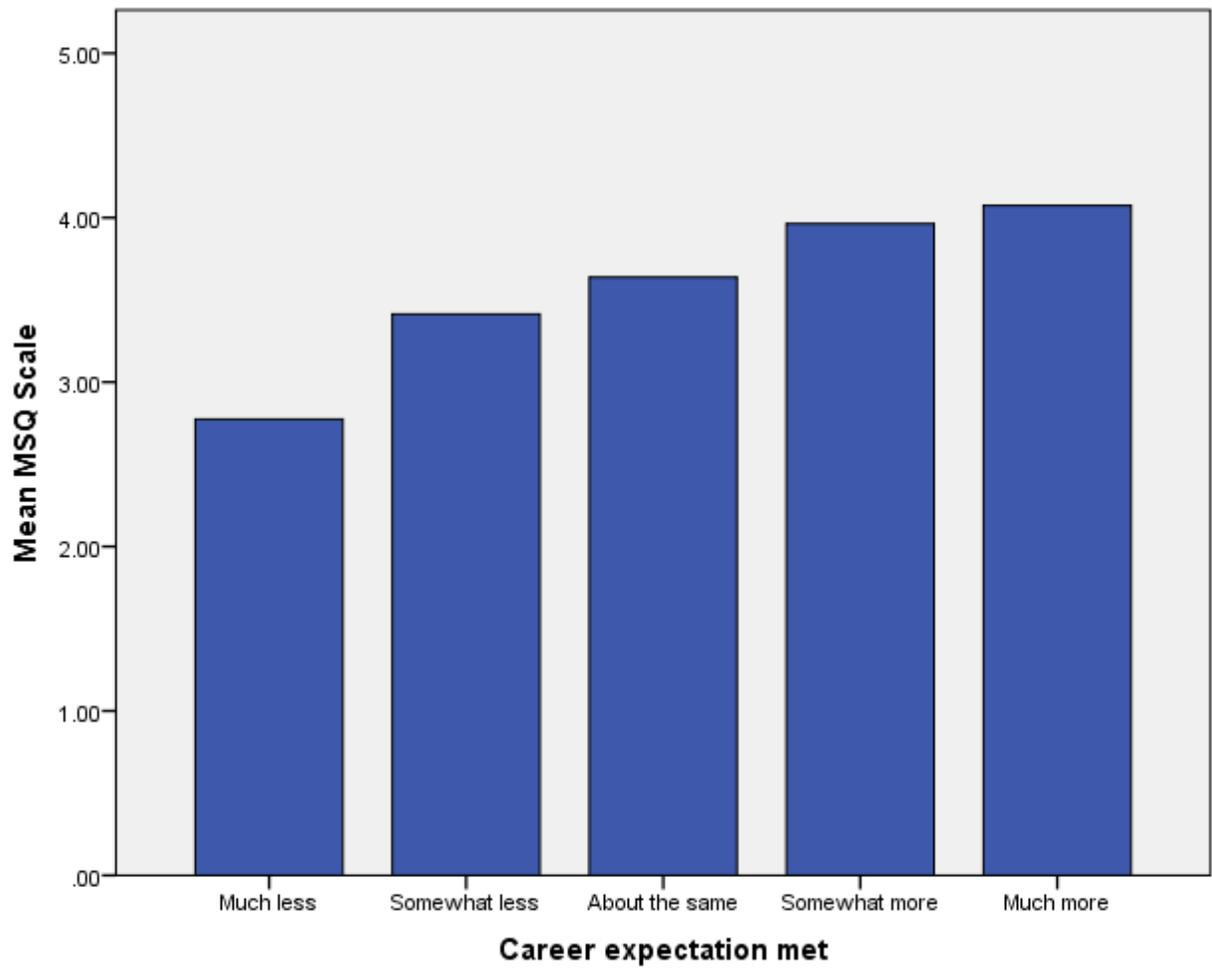




Figure 8. Scatterplot between SCS scale scores and years in occupation.

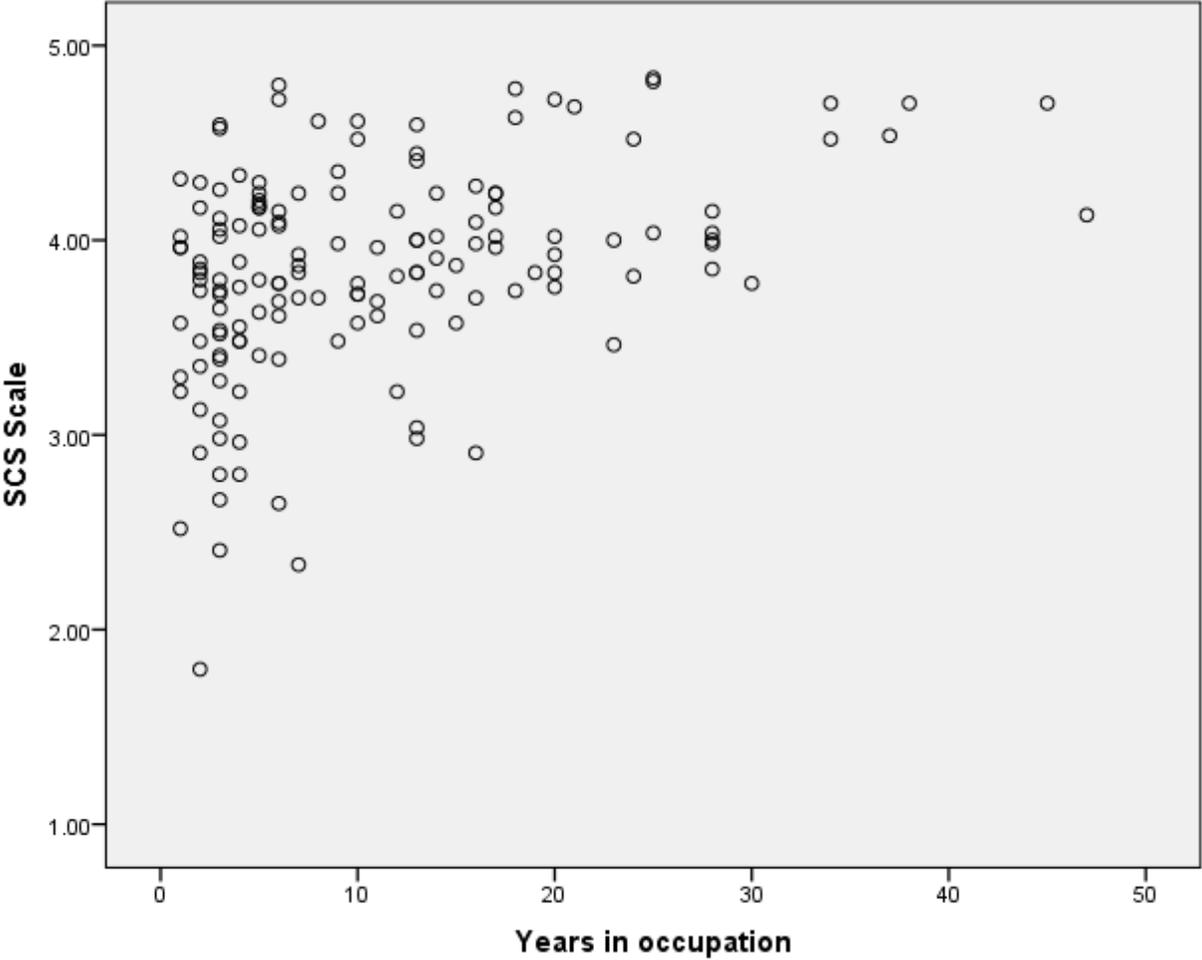


Figure 9. Bar chart showing mean SCS scale scores according to level of career expectation met.

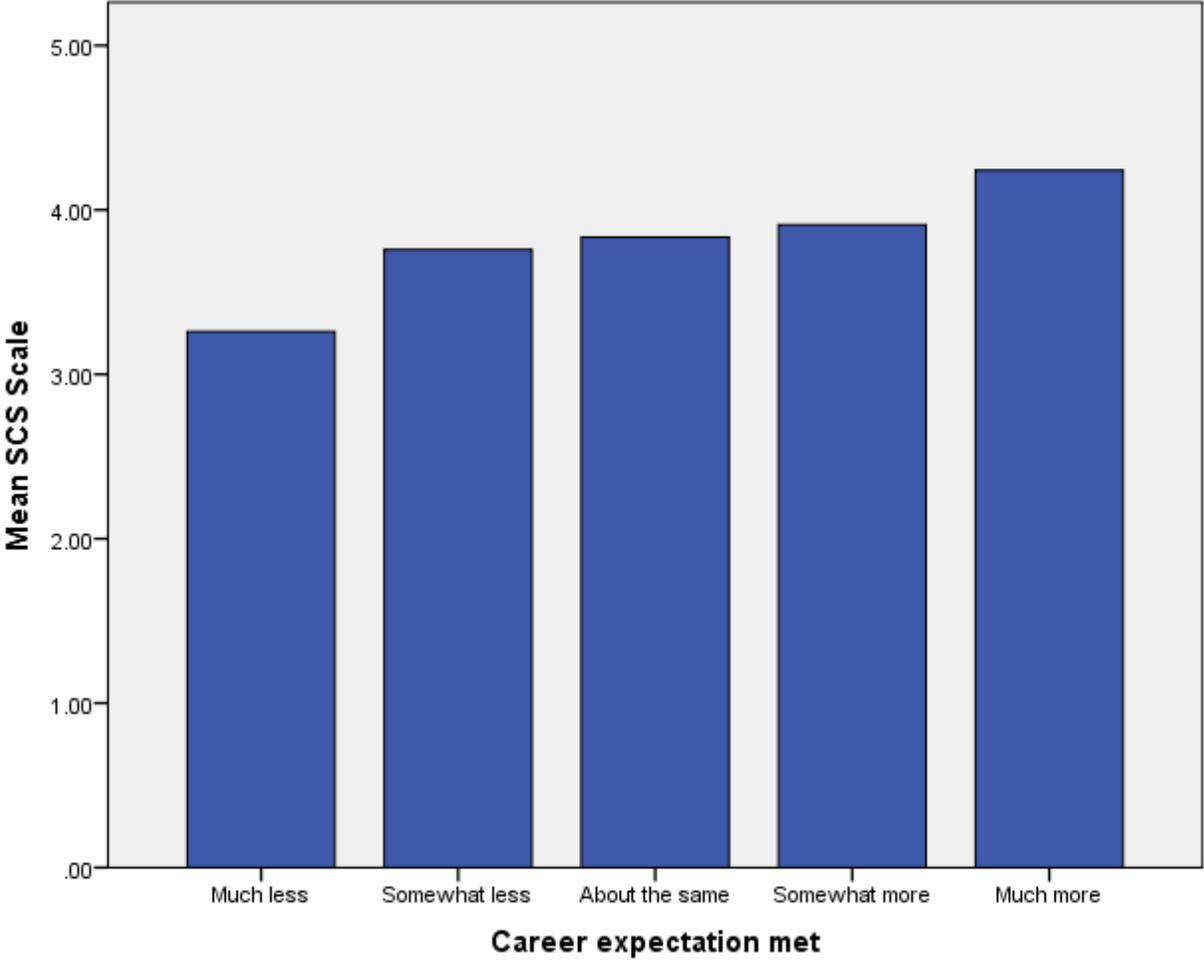


Figure 10. Scatterplot between LOC scale scores and age in years.

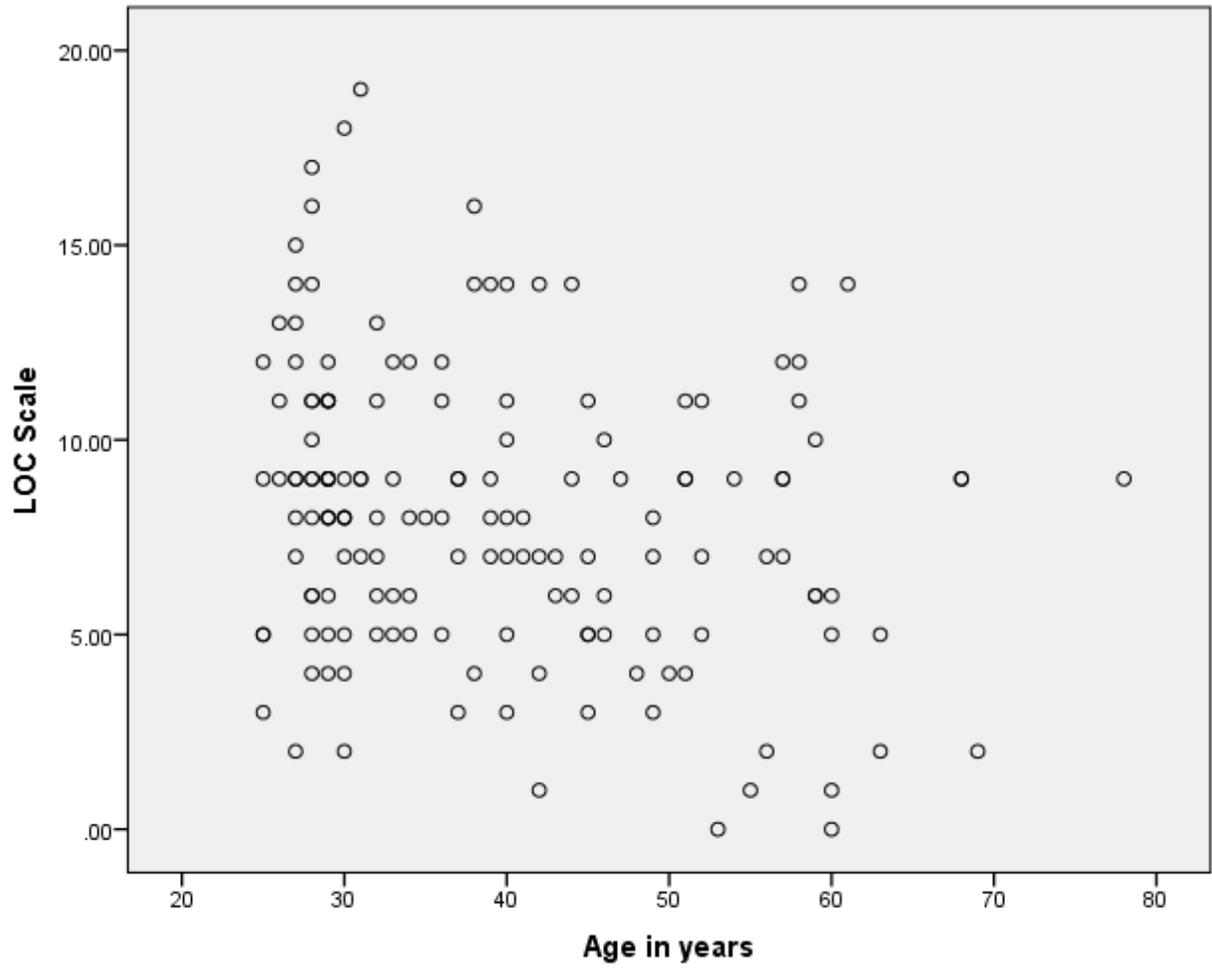


Figure 11. Scatterplot between LOC scale scores and years in occupation.

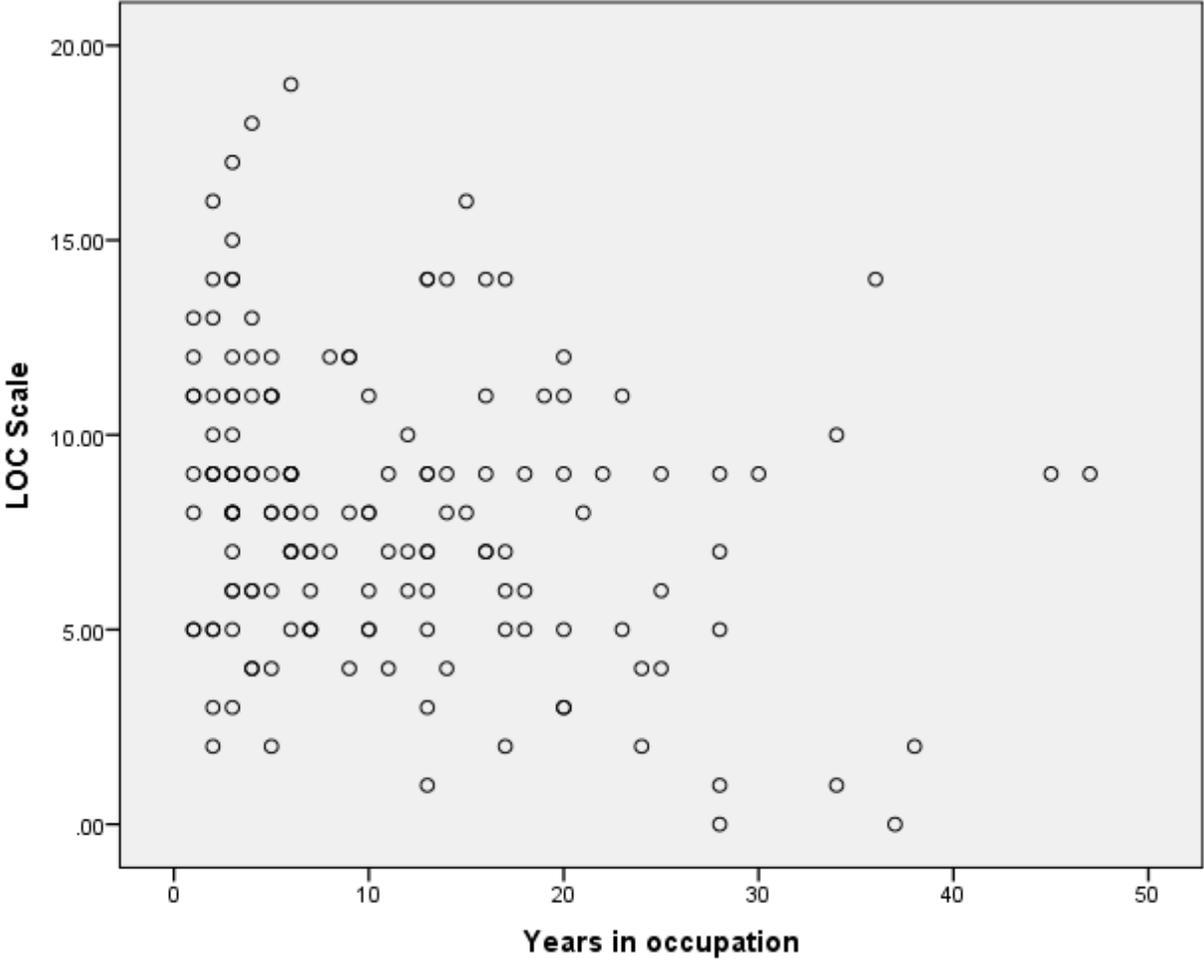


Figure 12. Bar chart showing mean LOC scale scores according to level of career expectation met.

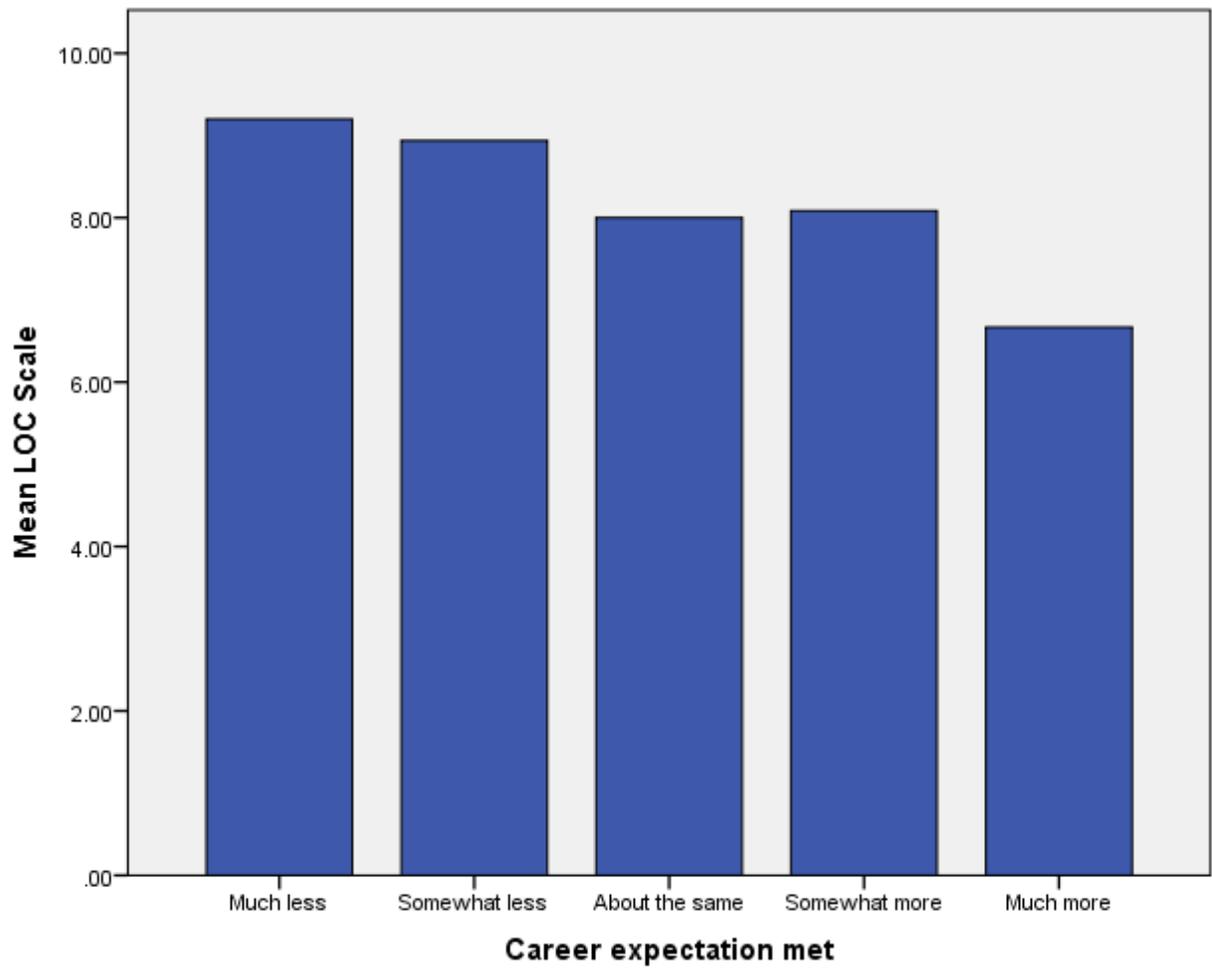


Figure 13. Scatterplot matrix showing relationships between MSQ scale, SCS scale, and LOC scale.

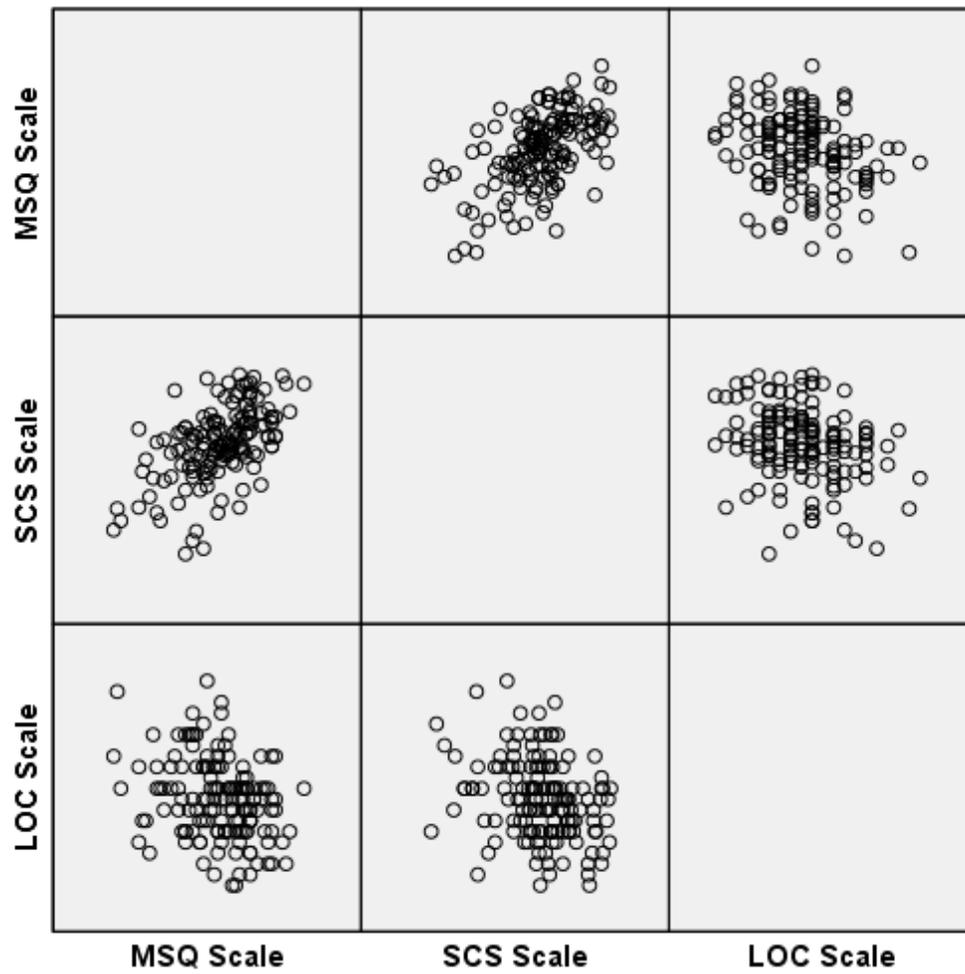
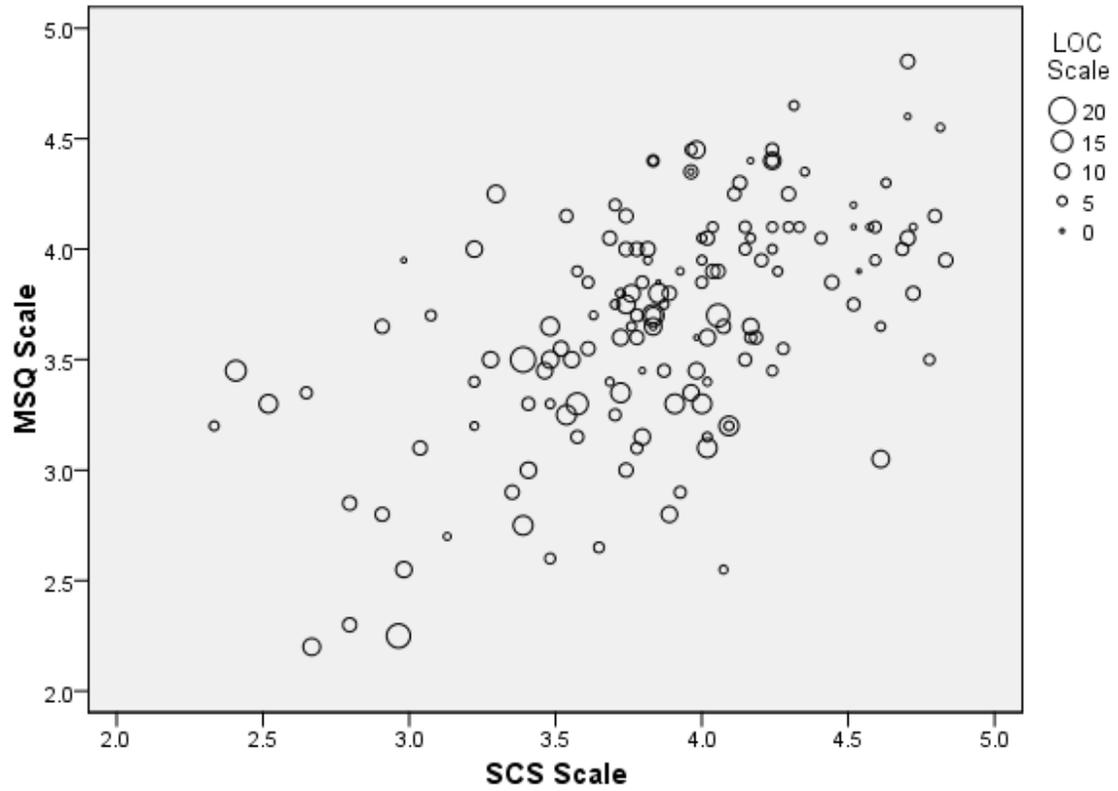


Figure 14. Scatterplot of SCS and MSQ scales, with size of marker illustrating the LOC scale score.



## **Appendices**

Appendix A: Final Survey

FINAL SURVEY FOUND:

<https://www.surveymonkey.com/s/schoolpsychologistquestionnaire>

## Appendix B: Demographic Questions

Please indicate your gender:

1 Female

2 Male

Other

What is your age (in years)? PLEASE ROUND UP TO A WHOLE NUMBER

How many years have you worked in your present occupation? (\*Do not count years of practicum experience)- PLEASE ROUND UP TO A WHOLE NUMBER

How many years have you worked at your present school? (\*Do not count years of practicum experience)? PLEASE ROUND UP TO A WHOLE NUMBER

What grades do you work with? (In your CURRENT position)

K

1

2

3

4

5

6

7

8

9

10

11

12

Other

Location of school:

1 Urban

2 Suburban

3 Rural

Compared to your initial expectations for your current position, your role as a school psychologist meets those expectations:

Much more

Somewhat more

About the same

Somewhat less

Much less

What is the highest level of education you have completed?

Masters/Specialist

Doctoral degree (i.e.- PhD, PsyD, EdD)

Masters/Specialist achieved with doctoral degree in progress

Please indicate your current location:

State- Pull Down Menu of United States

Please rank the following (Very High, High, Moderate, Low, Very Low)

Personal desire to leave your current job in the next 5 years

Personal desire to leave the profession of school psychology in the next 5 years

Appendix C: Minnesota Satisfaction Questionnaire (short form)

Directions- Ask yourself: How satisfied am I with this aspect of my job?

Very Satisfied  
Satisfied  
Neutral  
Dissatisfied  
Very Dissatisfied

Subscale	#	Question
IS	1.	Being able to keep busy all the time
IS	2.	The chance to work alone on the job
IS	3.	The chance to do different things from time to time
IS	4.	The chance to be “somebody” in the community
ES	5.	The way my boss handles his/her workers
ES	6.	The competence of my supervisor in making decisions
IS	7.	Being able to do things that don’t go against my conscience
IS	8.	The way my job provides for steady employment
IS	9.	The chance to do things for other people
IS	10.	The chance to tell people what to do
IS	11.	The chance to do something that makes use of my abilities
ES	12.	The way school policies are put into practice
ES	13.	My pay and the amount of work I do
ES	14.	The chances for advancement on this job
IS	15.	The freedom to use my own judgment
IS	16.	The chance to try my own methods of doing the job
GI	17.	The working conditions
GI	18.	The way my co-workers get along with each other
ES	19.	The praise I get for doing a good job
IS	20.	The feeling of accomplishment I get from the job

Key to which questions fall into which subscales:

IS- Intrinsic Satisfaction subscale (12 items)

ES= Extrinsic Satisfaction subscale (6 items)

GI= General items (2 items, plus all other items)

Scoring: (1) simple calculation (2) Subscale- intrinsic job factors, extrinsic job factors- scores = sum of items on the subscale (3) higher scores indicate higher job satisfaction

Appendix D: School Climate Survey- staff version revised

Directions- We would like to know how you feel about your school. Please indicate how strongly you agree or disagree with each statement by filling in ONE of the five responses

5- Strongly Agree

4- Agree

3- Not Sure

2- Disagree

1- Strongly Disagree

<b>Subscale</b>	<b>#</b>	<b>Question</b>
Leadership	1.	The principal sets the direction for this school
Achievement Motivation	2.	Students at this school are unwilling to learn
Order and Discipline	3.	Students here fight a lot
School/Parent/Community Relations	4.	Parents rarely attend school activities
Order and Discipline	5.	Students at this school have good self control
Leadership	6.	It is clear that the principal facilitates and guides the management process in the school
Collaborative Decision-Making	7.	Non-teaching staff are given opportunities to express their views on important matters
School Building	8.	The walls of this school are usually in good condition
Order and Discipline	9.	Teachers are often disrespected by students
Equity and Fairness	10.	Students are treated the same regardless of race
Order and Discipline	11.	The behavior of children at this school is good
School Building	12.	This school is usually clean and tidy
Staff Dedication to Student Learning	13.	At this school, teachers help students feel good about themselves
Leadership	14.	The principal has little contact with the teachers
Staff Expectations	15.	Staff at this school believe that very few of their students will make it to college
School/Parent/Community Relations	16.	There is good community involvement in the life of the school
Achievement Motivation	17.	Our students are willing and eager to learn
School Building	18.	Generally this school is well maintained
Equity and Fairness	19.	Students are treated the same regardless of social class
Staff Expectations	20.	At this school, staff members agree that there is little hope of a good future for their students
Staff Expectations	21.	Most staff at this school expect many of their students to go on to college
Collaborative Decision-Making	22.	Parents are given opportunities to express their views on important matters
Staff Dedication to Student Learning	23.	Teachers at this school generally try to

<b>Subscale</b>	<b>#</b>	<b>Question</b>
Learning		accommodate the different learning styles of the children
Collaborative Decision-Making	24.	Non-teaching staff are asked to help with decisions on school matters
Equity and Fairness	25.	Male and female students seem to benefit equally well from instruction
Staff Expectations	26.	Most staff here agree that many students at this school will not complete high school
School/Parent/Community Relations	27.	Parents visit the school on a regular basis
Leadership	28.	The principal is a problem-solver
Order and Discipline	29.	It is easy to guide the behavior of the students at this school
Achievement Motivation	30.	Students at this school do not care about learning
Order and Discipline	31.	Rules are frequently broken by students
Staff Expectations	32.	Teachers at this school expect many of their students to pursue some kind of higher education beyond high school
Leadership	33.	The principal is an instructional leader in the school
Leadership	34.	The principal provides constructive feedback to teachers about their performance
Equity and Fairness	35.	Students, regardless of race, seem to benefit equally well from instruction
Staff Expectations	36.	Staff at this school see a bright future for their students
Order and Discipline	37.	Students are orderly
Leadership	38.	Administrators here respect the teachers
Achievement Motivation	39.	Students here are caring people
Collaborative Decision-Making	40.	Teachers are given opportunities to express their views on important matters
Staff Dedication to Student Learning	41.	Teachers at this school are committed to helping students learn
School Building	42.	This school has a bright and pleasant appearance
School/Parent/Community Relations	43.	Parents attend parent-teacher association meetings
Achievement Motivation	44.	At this school, students help one another
Equity and Fairness	45.	Male and female students are treated equally well
Collaborative Decision-Making	46.	Professional non-teaching staff play an active role in decision-making groups
School Building	47.	There are often broken windows or doors in this school
School/Parent/Community	48.	At this school, parents frequently volunteer to help

<b>Subscale</b>	<b>#</b>	<b>Question</b>
Relations		on special projects
Order and Discipline	49.	Rules are obeyed by students
Staff Dedication to Student Learning	50.	At this school, teachers find ways to motivate their students to learn
Staff Dedication to Student Learning	51.	Teachers at this school try to make school work exciting for students
School/Parent/Community Relations	52.	Community members are unsupportive of school activities
School/Parent/Community Relations	53.	Members of the community work closely with school staff to improve the school
Order and Discipline	54.	There is good discipline at this school

Scoring items: The responses are coded in the following manner: strongly agree = 5, agree = 4, not sure = 3, disagree = 2, strongly disagree = 1. Items 2, 3, 4, 9, 14, 15, 20, 26, 30, 31, 47 and 52 are reverse scored after the frequency analysis on individual items have been performed, but before means of the variables are computed or any inferential analysis completed. These items are reverse scored because agreement with them reflects negative opinions of the school climate. A positive view of the climate should elicit disagreement with these items.

All the variables are scored in the positive direction: the higher the score on the variable, the greater the amount of that quality that staff perceives the school as having. The highest possible mean score on a variable is 5.0. The lowest possible mean score is 1.0.

**Achievement Motivation**

*(Items: 2, 17, 30, 39, 44)*

**Collaborative Decision-Making**

*(Items: 7, 22, 24, 40, 46)*

**Equity and Fairness**

*(Items: 10, 19, 25, 35, 45)*

**Leadership**

*(Items: 1, 6, 14, 28, 33, 34, 38)*

**Order and Discipline**

*(Items: 3, 5, 9, 11, 29, 31, 37, 49, 54)*

**School Building**

*(Items: 8, 12, 18, 42, 47)*

**School/Parent/Community Relations**

*(Items: 4, 16, 27, 43, 48, 52, 53)*

**Staff Dedication to Student Learning**

*(Items: 13, 23, 41, 50, 51)*

**Staff Expectations**

*(Items: 15, 20, 21, 26, 32, 36)*

Appendix E: Rotter's Internal-External Locus of Control Scale (I-E Scale)

Directions: For each of the following questions choose the statement that you most agree with

Only the 23 of the 29 items will be included in the final survey provided to participants. The 6 unscored items are omitted with time in mind.

Scoring	#	Question
NO SCORING	1a	Children get into trouble because their parents punish them too much
	1b	The trouble with more children nowadays is that their parents are too easy with them
[1 POINT]	2a	Many of the unhappy things in people's lives are partly due to bad luck
0	2b	People's misfortunes result from the mistakes they make
0	3a	One of the major reasons why we have wars is because people don't take enough interest in politics
[1 POINT]	3b	There will always be wars, no matter how hard people try to prevent them
0	4a	In the long run people get the respect they deserve in this world
[1 POINT]	4b	Unfortunately, an individual's worth often passes unrecognized no matter how hard he tries
0	5a	The idea that teachers are unfair to students is nonsense
[1 POINT]	5b	Most students don't realize the extent to which their grades are influenced by accidental happenings
[1 POINT]	6a	Without the right breaks, one cannot be an effective leader
0	6b	Capable people who fail to become leaders have not taken advantage of their opportunities
[1 POINT]	7a	No matter how hard you try, some people just don't like you
0	7b	People who can't get others to like them don't understand how to get along with others
NO SCORING	8a	Heredity plays the major role in determining one's personality
	8b	It is one's experiences in life which determine what they

Scoring	#	Question
		are like
[1 POINT]	9a	I have often found that what is going to happen will happen
0	9b	Trusting fate has never turned out as well for me as making a decision to take a definite course of action
0	10a	In the case of the well prepared student there is rarely, if ever, such a thing as an unfair test
[1 POINT]	10b	Many times, exam questions tend to be so unrelated to course work that studying is really useless
0	11a	Becoming a success is a matter of hard work; luck has little or nothing to do with it
[1 POINT]	11b	Getting a good job depends mainly on being in the right place at the right time
0	12a	The average citizen can have an influence in government decisions
[1 POINT]	12b	This world is run by the few people in power, and there is not much the little guy can do about it
0	13a	When I make plans, I am almost certain that I can make them work
[1 POINT]	13b	It is not always wise to plan too far ahead because many things turn out to be a matter of good or bad fortune anyhow
NO SCORING	14a	There are certain people who are just no good
	14b	There is some good in everybody
0	15a	In my case getting what I want has little or nothing to do with luck
[1 POINT]	15b	Many times we might just as well decide what to do by flipping a coin
[1 POINT]	16a	Who gets to be the boss often depends on who was lucky enough to be in the right place first
0	16b	Getting people to do the right thing depends upon ability – luck has little or nothing to do with it
[1 POINT]	17a	As far as world affairs are concerned, most of us are the victims of forces we can neither understand, nor control
0	17b	By taking an active part in political and social affairs the

Scoring	#	Question
		people can control world events
[1 POINT]	18a	Most people don't realize the extent to which their lives are controlled by accidental happenings
0	18b	There really is no such thing as "luck"
NO SCORING	19a	One should always be willing to admit mistakes
	19b	It is usually best to cover up one's mistakes
[1 POINT]	20a	It is hard to know whether or not a person really likes you
0	20b	How many friends you have depends upon how nice a person you are
[1 POINT]	21a	In the long run, the bad things that happen to us are balanced by the good ones
0	21b	Most misfortunes are the result of lack of ability, ignorance, laziness, or all three
0	22a	With enough effort we can wipe out political corruption
[1 POINT]	22b	It is difficult for people to have much control over the things politicians do in office
[1 POINT]	23a	Sometimes I can't understand how teachers arrive at the grades they give
0	23b	There is a direct connection between how hard I study and the grades I get
NO SCORING	24a	A good leader expects people to decide for themselves what they should do
	24b	A good leader makes it clear to everybody what their jobs are
[1 POINT]	25a	Many times I feel that I have little influence over the things that happen to me
0	25b	It is impossible for me to believe that chance or luck plays an important role in my life
0	26a	People are lonely because they don't try to be friendly
[1 POINT]	26b	There's not much use in trying too hard to please people, if they like you, they like you
NO SCORING	27a	There is too much emphasis on athletics in high school
	27b	Team sports are an excellent way to build character

<b>Scoring</b>	<b>#</b>	<b>Question</b>
0	28a	What happens to me is my own doing
[1 POINT]	28b	Sometimes I feel that I don't have enough control over the direction my life is taking
[1 POINT]	29a	Most of the time I can't understand why politicians behave the way they do
0	29b	In the long run the people are responsible for bad government on a national as well as a local level

\*Scoring:

A high score= External Locus of Control

A low score= Internal Locus of Control

## Appendix F: State Correspondence

Initial email to state association presidents and membership committee chairs:

Good afternoon!

I am an Alfred University school psychology doctoral student working on my dissertation. My purpose is to examine the professional satisfaction (and school climate) of school psychologists across the country through an on-line survey. This research project has been approved by the Alfred University Human Subjects Review Board (the IRB of Alfred University). I would love to include participants from your organization in my participant pool. Do you have a procedure to request samples/contacts of members for research purposes? I apologize if I have directed this to you in error. I found your contact information on your state organization's website.

Thank you for your help. I look forward to hearing from you!

Samantha Ioia, MA, MA, CAS, NCSP  
Alfred University Doctoral Candidate  
School Psychologist, Rocky Hill Public Schools  
NY, VT, CT Certified School Psychologist  
[smi11@alfred.edu](mailto:smi11@alfred.edu)

## Appendix G: Participant Correspondence

Message to be forwarded by email to state association membership

Hello!

My name is Samantha Ioia. I'm a doctoral candidate at Alfred University, hoping to appeal to your members' professional kinship with their participation in my dissertation questionnaire. The focus of my research is on the perceived school climate and professional satisfaction of school-based school psychologists. Research participants would complete a 20 minute survey which can be accessed online. Upon survey completion, participants are eligible to win a \$100.00 gift card to Amazon.com. All participants are protected by the ethical and confidentiality requirements as specified by the Human Subjects Board (the IRB) of Alfred University.

Interested parties please click on the following link:

<https://www.surveymonkey.com/s/schoolpsychologistquestionnaire>

Thank you so much for your time and consideration.

My most sincere gratitude,  
Samantha Ioia, MA/CAS, NCSP  
Alfred University, Doctoral Candidate  
NY, CT, VT Certified School Psychologist  
[smi11@alfred.edu](mailto:smi11@alfred.edu)

Appendix H: Descriptions of the 9 School Climate Survey staff version subscales

<b>Variable</b>	<b>Definition</b>	<b>Reliability</b>
<b>Achievement Motivation</b> <i>(Items: 2, 17, 30, 39, 44)</i>	The extent to which students at the school believe that they can learn and are willing to learn.	0.78
<b>Collaborative Decision-Making</b> <i>(Items: 7, 22, 24, 40, 46)</i>	The involvement of parents, students, and staff in the decisions affecting the school.	0.84
<b>Equity and Fairness</b> <i>(Items: 10, 19, 25, 35, 45)</i>	The equal treatment of students regardless of ethnicity or gender.	0.86
<b>Leadership</b> <i>(Items: 1, 6, 14, 28, 33, 34, 38)</i>	The principal's role in guiding the direction of the school and in creating a positive climate.	0.90
<b>Order and Discipline</b> <i>(Items: 3, 5, 9, 11, 29, 31, 37, 49, 54)</i>	Appropriateness of student behavior in the school setting.	0.93
<b>School Building</b> <i>(Items: 8, 12, 18, 42, 47)</i>	The appearance of the school building.	0.87
<b>School/Parent/Community Relations</b> <i>(Items: 4, 16, 27, 43, 48, 52, 53)</i>	The support and involvement of parents and the community in the life of the school.	0.89
<b>Staff Dedication to Student Learning</b> <i>(Items: 13, 23, 41, 50, 51)</i>	The effort of teachers to get students to learn.	0.85
<b>Staff Expectations</b> <i>(Items: 15, 20, 21, 26, 32, 36)</i>	The expectations of staff members that students will do well academically and will lead a successful life.	0.87

\*(Haynes, Emmons, Ben-Avie, & Comer, 1996)