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Teaching and Non-Teaching Staff Job Satisfaction

Jason Curl
Olivet Nazarene University, jcurl@olivet.edu

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TEACHING AND NON-TEACHING STAFF JOB SATISFACTION

By

Jason Curl

Dissertation

Submitted to the Faculty of

Olivet Nazarene University

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Dissertation

[Signatures and dates]
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The process of obtaining higher education can be a complex task full of hurdles and time limits. Through this process, countless individuals have inspired, helped, and guided me on this journey of personal and professional improvement. This dissertation is a result of diligent work by Olivet Nazarene University, and all affiliated with the Ethical Leadership Program. A special acknowledgement goes to my advisor Dr. Kelly Brown and my dissertation reader, Dr. Sarah Spruce, whose focus and guidance has changed my life for the better. These individuals, along with Olivet Nazarene University, will be an ever-present guide, inspiration, and trainer in my pursuit of my professional goals.

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ABSTRACT

This study focuses on the problem of attrition of teacher in the modern educational system, and the effect job satisfaction has on teacher attrition. Job satisfaction was examined for teaching and non-teaching staff in a high school setting to determine is difference between the employees using the Minnesota Satisfaction Survey Short Form. Analytical methodology was implemented utilizing a MANOVA to examine difference between teaching and non-teaching groups. Results indicated that there was a significant higher level for teaching staff for overall and intrinsic job satisfaction. Extrinsic job satisfaction yielded no significant difference between the groups. Furthermore, Dimensional statistics were employed to rank the job satisfaction dimensions between the two employee groups.
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CHAPTER I
INTRODUCTION

The underlying problem is simple: teacher attrition. Teachers are leaving the teaching profession to pursue more lucrative and satisfying careers (Cha & Vogel, 2001). This exodus from teaching is leaving a void in experienced, qualified teachers. To fill this void the schools and school districts have to spend time and money to remedy the situation. In contrast, research has found that non-teaching and administrative staff is more likely to remain in the field of education than classroom teachers are. The main question is why. The purpose of this study is to compare the job satisfaction of teaching staff to non-teaching staff to determine if differences in satisfaction or dissatisfaction between the two groups exist. In this chapter, the reader will find an overview of the problem statement, background information, description of terms, research questions, and the process to complete the study. The hopes of this research are to add to the growing body of knowledge of teacher and staff job satisfaction.

Statement of Problem

Teacher attrition has increased at a significant rate. Between 1999-2001 the teacher attrition rate increased by 7.5%. To add to this problem, 20% of the teachers resigning from teaching positions enter into fields other than education (Cha & Vogel, 2001). Combine this attrition with an increased need for teachers due to growing school populations and a strain on the education system occurs. Not only is the high teacher
turnover rate causing shortages of available teachers, it is costing school districts money to interview and hire new teachers (Strunk & Robinson, 2006). The main factor that contributes to teacher attrition is the decrease in satisfaction with respect to their vocation (Cha & Vogel). In Australia and the United Kingdom, steps have been taken to improve teacher satisfaction through effective programs, but little effort has been made in the United States to study or remedy this phenomenon (Strunk & Robinson).

The purpose of this study is to determine how non-teaching staff job satisfaction compares to high school teacher job satisfaction in order to add to the knowledge base surrounding teacher job satisfaction. Although many factors contribute to teacher and non-teacher satisfaction, analyzing the differences in these factors can help administration staff to provide a working environment that promotes retention of teachers and non-teaching support staff in high schools.

According to Balkar (2009), administrations’ activities and attitudes can cause a significant change in the job satisfaction of classroom teachers. Any behavior or attitude from administration staff perceived as negative by the teacher can manifest in negative job satisfaction reporting. When teachers become dissatisfied with their chosen careers, they are more likely to leave (Strunk & Robinson, 2006). The goal of this research is to determine how administration and non-teaching support staff perception of their job satisfaction compares to the job satisfaction of teachers under their supervision. By analyzing the similarities or differences, the knowledge base related to teacher satisfaction can be expanded and the problem of increased teacher attrition can be better understood (Cha & Vogel, 2001).
Background

Job Satisfaction and Attrition

Job satisfaction among teachers is the number one cause of attrition in the educational system (Strunk & Robinson, 2006). Stresses such as poor working conditions, poor relationships with colleges or students, and low pay rates all affect job satisfaction of educators. Strunk and Robinson found that when teachers are dissatisfied with their chosen vocation, they leave the teaching field. Strunk and Robinson concluded that when teachers report a low level of job satisfaction they are more likely to leave the teaching field permanently. Strunk and Robinson further discussed the burden of financial cost associated with teachers leaving their positions. Cost associated with hiring new teachers can place a strain on school districts financially as well as physically. Many school districts implement new teacher programs, in which more veteran teachers are paid to mentor new teachers into the school culture. When school districts hire new teachers they invest time and money into candidates in hopes they will retain employment and give back with years of service. Consequently, when teachers leave the field, this investment of time and money can be lost to never be regained. Cha and Vogel (2001) reported that teacher attrition increase 7.5% between the years of 1999 and 2001. Of these teachers leaving their current positions, 20% leave the teaching field to find employment in other fields. These teachers leaving the teaching field leave a void that must be filled amidst an ever-growing need for qualified teachers.

Job Satisfaction verse Morale

Rosser (2004) defined job satisfaction and morale as two separate and distinguishable factors that affect job performance and job longevity. Rosser defined job
satisfaction as a quantitatively measurable condition that is affected by external factors such as working conditions and perceived co-worker relations. Rosser further defined employee morale as qualitatively measurable condition that is affected by conditions both external and internal. Rosser explained that employee morale is an intrinsic factor that can be changed by stresses inside the workplace such as working conditions and supervisor relations as well as stresses outside the workplace such as home life and financial worries. Rosser further explained that job satisfaction is increasingly determined by extrinsic factors of the workplace. External factors include, but are not limited to, physical working conditions, employee relations, pay rate, and promotion rate. All factors discussed in Rosser’s study can be tested and quantified for analysis purposes.

Minnesota Satisfaction Questionnaire

Weiss, Dawis, England, and Lofquist (1967) developed the Minnesota Satisfaction Questionnaire (MSQ) to quantitatively measure job satisfaction with reliability value of $\alpha = 0.88$ and construct validity. The original MSQ included 100 questions and measure job satisfaction on an interval scale of 20-100. Scores 25 and below are considered low job satisfaction, scores between 25 and 75 are considered moderately satisfied, and scores 75 and above indicate high job satisfaction. The time required to take the MSQ is approximately 15-20 minutes. To shorten the time requirements, Weiss, et al. developed a short form version of named the Minnesota Satisfaction Questionnaire Short Form (MSQ-SF). The MSQ-SF consists of 20 questions and requires approximately five minutes to complete. The MSQ-SF is appropriate when time constraints or large sample sizes are a limiting factor.

Job Satisfaction Measurement for Administration verse Teaching Staff
Several methods exist for researchers to measure job satisfaction of participants. Different employment positions typically use unique and researcher designed surveys to measure job satisfaction. Traditionally, school districts and educational review organizations used specific tools designed to focus on teachers actively participating in classroom instruction. Surveys such as the Teacher Satisfaction Survey (TSS) and Working in Special Education Survey (WSES) are used to measure the satisfaction of intrinsic and extrinsic factors of teachers in the classroom. These measurements are useful when focusing on classroom instructors, but do not reliably measure administration or non-teaching staff. To measure both teacher and administrations satisfaction, Huysman (2008) used the MSQ to measure job satisfaction of rural teachers and administrators in their first four years of employment to those who had left the profession for other professions. Huysman used the MSQ survey to better analyze teaching and administration staff as employees, not as teachers. Surveys such as the TSS and WSES take into account the dynamics of the classroom as well as student/teacher relation health. When comparing TSS teaching centered results to MSQ employment centered results required for administration staff, alignment problems would arise.
Research Questions

1. How does overall positive or negative non-teaching staff job satisfaction compare to overall teacher job satisfaction?

2. How does extrinsic and intrinsic non-teaching staff job satisfaction compare to extrinsic and intrinsic teacher job satisfaction?

3. What dimensions do teaching staff and non-teaching staff find important in determination of job satisfaction?

Description of Terms

*Ability Utilization.* The chance for the employee to make use of their abilities as measured by the MSQ-SF (Weiss, Dawis, England, & Lofquist, 1967).

*Achievement.* The feeling of accomplishment from an employee as measured by the MSQ-SF (Weiss, et al, 1967).

*Activity.* Ability of the employee to keep busy all the time as measured by the MSQ-SF (Weiss, et al, 1967).

*Advancement.* The perception of the employee to advance in rank or employment position as measured by the MSQ-SF. (Weiss, Dawis, England, & Lofquist, 1967)

*Authority.* The chance for the employee to issue order to others as measured by the MSQ-SF (Weiss, et al, 1967).

*Company Policies.* The way the company of the employee practices its policies as measured by the MSQ-SF (Weiss, et al, 1967).

Co-workers. The perceptions participants have toward their co-workers as measured by the MSQ-SF (Weiss, et al, 1967).

Creativity. The chance for the employees to try their own methods as measured by the MSQ-SF (Weiss, et al, 1967).

Independence. The chance for the employee to work alone in his or her job as measured by the MSQ-SF (Weiss, et al, 1967).

Job Satisfaction. Satisfaction related to measurable conditions, both intrinsic and extrinsic, caused by the workplace. (Rosser, 2004)

Morale. Primarily intrinsically determined motivation and satisfaction related to one’s career. (Rosser, 2004)

Moral Values. The employee’s ability to do things that don’t go against their moral standard as measured by the MSQ-SF (Weiss, et al, 1967).

Recognition. Praise the employee is receiving as measured by the MSQ-SF (Weiss, et al, 1967).

Responsibility. The freedom of the employee to use his or her own judgment as measured by the MSQ-SF (Weiss, et al, 1967).


Social Service. The chance for the employee to do good deeds for others as measured by the MSQ-SF (Weiss, et al, 1967).

Social Status. The employee’s perception of being “somebody” in the community as measured by the MSQ-SF (Weiss, et al, 1967).
Supervision-Human Relations. The perception of a supervisor handles their employees as measured by the MSQ-SF (Weiss, et al, 1967).

Supervision-Technical. The perception of confidence of a supervisor by employees as measured by the MSQ-SF (Weiss, et al, 1967).

Variety. The employees chance to do something different from time to time as measured by the MSQ-SF (Weiss, et al, 1967).

Working Conditions. The physical conditions of the employee’s workplace as measured by the MSQ-SF (Weiss, et al, 1967).

Significance of the Study

The significance of this study is to add to existing knowledge on factors that affect job satisfaction in the teaching vocation. The results and conclusions from this study will help those concerned with teacher satisfaction to improve teacher satisfaction by using the results as a learning tool. Results of this study present a comparison between job satisfactions of two distinct groups in education. Any differences between the groups can be used a precedent to aid further studies.

Process to Accomplish

Introduction

The purpose of this study is to determine how non-teaching staff job satisfaction compares to high school teacher job satisfaction. Although many factors contribute to teacher satisfaction, determining these factors can help the administration staff to provide a working environment that promotes retention of teachers in high schools. The main questions being asked in this research are: 1. How does overall positive or negative administrative job satisfaction compare to overall teacher job satisfaction. 2. How does
extrinsic or intrinsic administrative job satisfaction compare to extrinsic and intrinsic
teacher job satisfaction, and 3. What dimensions do teaching staff and non-teaching staff
find important in determination of job satisfaction?

Methodology of this study is quantitative in nature. Since the sample size was large, a
qualitative study could not be completed within the time constraints given for this
program. (Gay, Mills, & Airasian, 2012; Salkind, 2011) Once quantitative data from the
participants was obtained, overall job satisfaction rates were compared between teaching
and non-teaching staff.

According to Balkar (2009), administration staff activities and attitudes can cause a
significant change in the job satisfaction of classroom teachers. Any behavior or emotion
from administration staff perceived as negative by the teacher will manifest in negative
job satisfaction reporting (Cha & Vogel, 2001). When teachers become dissatisfied with
their chosen careers, they are more likely to leave (Strunk & Robinson, 2006). The goal
of this research is to determine how non-teaching staff perception of their job satisfaction
comparis to job satisfaction of teachers under their supervision. By analyzing the
differences or similarities, the knowledge base related to teacher satisfaction can be
expanded and the problem of increased teacher job satisfaction and attrition can be better
understood.

This section of the study will outline the population, methods, and the data analysis
techniques of the study. All processes performed in this study were in accordance to IRB
ethical guidelines and all participants were willing participants.
Participants

The population of this study included a south suburban community in Illinois. The sample of this study included 75 teachers and 40 non-teaching staff. Sampling from this population is limited to employees of the cooperating district’s teachers and non-teaching staff. Due to the focused nature of this study, simple random sampling would not gather viable correlational data due to limited population restriction on this study. Convenience sampling, or sampling those participants readily available in a particular population, was performed instead to select enough participants from non-teaching staff and teaching staff (Leedy & Ormrod, 2012).

Measures

The Minnesota Satisfaction Questionnaire Short Form (MSQ-SF) measured teacher and non-teacher job satisfaction on an ordinal scale of 20 to 100. Scores below 25 are considered low job satisfaction, between 25 and 75 moderate job satisfaction, and above 75 are considered high job satisfaction ratings. According to Holcomb-McCoy and Addison-Bradley (2005) this survey allowed the researcher to analyze 20 factors pertaining to job satisfaction of teacher and non-teaching staff. The 20-question short form version of the MSQ will also promoted a higher response rate than the 100 question MSQ (Holcomb-McCoy & Addison-Bradley). The MSQ-SF will measure 20 dimensions of job satisfaction quantitatively on a five-point Likert scale of 1-5. A dimension score of one is considered the lowest possible report and five the highest report. The 20 dimensions of job satisfaction which the MSQ-SF examines are as follows: Ability Utilization, Achievement, Activity, Advancement, Authority, Company Policies, Compensation, Co-workers, Creativity, Independence, Security, Social Service, Social
Status, Moral Values, Recognition, Responsibility, Supervision-Human Relations, Supervision-Technical, Variety, and Working Conditions. Intrinsic factors measured by the MSQ-SF include Ability Utilization, Achievement, Activity, Authority, Creativity, Independence, Security, Social Service, Social Status, Moral Values, Responsibility, and Variety. Extrinsic factors measured by the MSQ-SF Advancement, Company Policies, Compensation, Co-workers, Recognition, Supervision-Human Relations, Supervision-Technical, and Working Conditions. Each dimension is measured by a dedicated question designed specifically to be reliable in that particular job satisfaction dimension.

Furthermore the MSQ-SF has a reliability score of $\alpha = 0.88$ and construct validity (Weiss et al, 1967).

Data from the surveys were compared between researcher assigned teacher and non-teacher groups via the Multivariate Analysis of Variance (MANOVA), a statistical method. The dependent variable level of job satisfaction will be compared to the independent variable level of teacher or non-teacher employment status. Overall satisfaction of the two research assigned groups were compared and determined if any significant difference was found. MANOVA statistics were performed on extrinsic and intrinsic dimensions of job satisfaction between the two groups. Dimension scores were averaged and analyzed for significant difference between extrinsic and intrinsic job satisfaction dimensions.

Procedure

After appropriate approval was gained, consent forms for adults were distributed to the participants via a cooperating co-principal. Once the IRB consent forms were signed and collected, the MSQ-SF surveys were then distributed during a faculty meeting
by an instructed volunteering co-principal. A sufficient time of 15 to 20 minutes was given for the participants to complete the MSQ-SF survey. Surveys were collected directly following the survey session using a drop box format to ensure confidentiality. Surveys were then sorted into two main categories; non-teaching staff and teaching staff. Data analysis was then completed using MANOVA for overall aggregated scores and aggregated intrinsic and extrinsic scores.

Analysis

Aggregated results from the MSQ-SF were compared between non-teaching staff and teaching staff status to determine if a difference was found. Since two independent variables, administration and teacher status was compared to multiple dependant variables, a MANOVA analysis was performed in determining if significant differences are found. For each of the research questions the following analysis was performed:

1. How does overall positive or negative non-teaching staff job satisfaction compare to overall teacher job satisfaction?

Results from the MSQ-SF were separated according to job description. Overall job satisfaction scores from the MSQ-SF were aggregated for non-teaching staff and teaching staff. Aggregated overall satisfaction data was analyzed for inverse relationships or direct relationships by using MANOVA statistical methodology to determine if significant differences in overall job satisfaction are seen between the two assigned groups. Results were then interoperated to determine is a correlation of high or low job satisfaction of one group related to the opposite group.
2. How does extrinsic or intrinsic non-teaching staff job satisfaction compare to extrinsic and intrinsic teacher job satisfaction?

Aggregated intrinsic and aggregated extrinsic data collected from the MSQ-SF was calculated for both non-teaching and teaching staff. Intrinsic and extrinsic dimensions and compared between non-teacher and teacher groups. Inverse or direct correlation was determined using the MANOVA to determine if statistically significant differences in intrinsic and extrinsic job satisfaction scores were found between teachers and non-teaching staff.

3. What dimensions do teaching staff and non-teaching staff find important in determination of job satisfaction?

Descriptive statistical methods were used to compare the aggregated means of each dimension. The highest three and lowest three ranking dimensions, as determined by the MSQ-SF, obtained from the non-teaching staff were compared to the highest three and lost three ranking dimensional scores from teaching staff. Results were then descriptively analyzed for differences.

Summary

To summarize, this research study measured and compared overall job satisfaction of teaching and non-teaching staff, as well intrinsic and extrinsic dimensions of job satisfaction, and analyzed for significant differences between non-teaching staff and teaching staff among 20 job satisfaction dimensions. The intention of this study was to find comparative evidence of both similarities and differences of what effects job satisfaction for the two distinct groups. Results of this study will add to the knowledge of
job satisfaction and how it is affected by the everyday conditions of the educational system and to improve the job satisfaction of teachers through further study.

In order to understand how job satisfaction affects teachers, and how it is contemporarily measured, a review of literature was conducted to gain insight into the phenomenon of teacher attrition. Chapter two of this dissertation gives an overview of teacher attrition, job satisfaction, and measurements of job satisfaction, as well as how each of these topics relates to one another. While all aspects of job satisfaction have not been researched, the purpose of the following literature review was to give the reader a comprehensive view of contemporary literature on teacher job satisfaction.
CHAPTER II
REVIEW OF THE LITERATURE

Introduction

The purpose of this study is to examine the differences between teacher and non-teacher job satisfaction within a suburban high school. The study is centered on the growing problem of teacher attrition and its causes. Strunk and Robinson (2006) concluded that teachers are leaving the teaching field primarily due to dissatisfaction with their chosen careers. The purpose of this study was to examine how teacher satisfaction compares to other occupations within the confines of a high school setting. Measurement of teacher and non-teacher satisfaction in this study was accomplished using the MSQ-SF. Use of the MSQ-SF will allow job satisfaction levels to be quantitatively measured and analyzed for differences between teaching and non-teaching staff. The following is a literature review of current and historical literature on teacher attrition, job satisfaction, and the use of the Minnesota Satisfaction Questionnaire, of which is similar and relative to this study’s focus.

Teacher Attrition

Teacher shortages and teacher attrition are on the rise in the United States and around the world. In a Teacher Shortage Report by the U.S Department of Education
(2011), teacher shortages in Illinois have increased 23% from the 1990-91 school years to the 2010-11 school years. Shortages of teachers in the fields of mathematics and science are the most affected. In fact, between the years of 1990-91 and 2010-11, science and math teacher shortages have been reported statewide in Illinois. Other states significantly affected by science and mathematics teacher shortages include Alabama, Indiana, Ohio, Iowa, Wisconsin, Mississippi, and Michigan. Special education and bilingual education programs have shown an increase in teacher shortages as well. These shortages are caused by a combination of lack of qualified candidates and teachers leaving the vocation permanently. The significance of the Teacher Shortage Report reinforces the need of addressing teacher attrition. While lack of qualified candidates can be caused by factors outside the control of the public education system, teacher attrition may be addressed within the confines of education.

A study by Norton (1999) exemplified the importance of teacher attrition rates in Illinois. In Norton’s study, rates of Illinois teacher attrition were studied using state database information along with interviews conducted by the researcher of Illinois School Board Presidents. The results of Norton’s study indicated that 25% of Illinois teachers are leaving the field after only one year of service; an additional 25% of teachers leave between years two and four. Thus, approximately 50% of teachers who started in the education field remain in the field after four years. The 50% teacher attrition rate after four years compares to 37% in high technology fields and 24% in industry after five years. The results showed a significant problem. In fact, one school board president stated in an interview by Norton “Teacher attrition is the most serious problem we face in teaching today.” Further interviews conducted of school board presidents yielded several
causes of teacher attrition including dissatisfaction with job requirements and salary. The results of Norton’s study support the need for further investigation of the correlation between job satisfaction and teacher attrition.

Strunk and Robinson (2006), in a study to determine the cause of teacher attrition, quantitatively studied data from national databases that determined the main causes of teachers exodus from the field of teaching. By using the Schools and Staffing Survey (SASS) and the Teacher Satisfaction Survey (TFS) from 2000-01 school year archived data, Strunk and Robinson concluded that 7% of teachers permanently left the teaching field in the studied period. Strunk and Robinson (2006) further concluded that teacher exodus significantly affects the availability of qualified teachers for hire and increases the cost school districts spend every year in new teacher training. Strunk and Robinson also concluded that the resulting attrition is adding to the cost of education due to the prevalence of teacher mentor and training programs present in most contemporary school districts. These programs are designed to transition the novice teacher into a professional teacher and increase his or her likelihood of staying within the district. Strunk and Robinson further concluded that the necessity of elaborate teacher/mentor programs might not be needed if the programs do not significantly curve teachers’ attrition.

In an effort to determine factors that promoted or discouraged teacher retention, Perrachione, Petersen, and Rosser (2008) performed a quantitative study on Missouri Public Elementary Schools. To accomplish this, Perrachione et al. randomly selected 300 teachers from various elementary schools in Missouri. All teachers selected remained in their current positions for longer than five years. A newly developed 34-question, seven-point Likert survey was piloted on the participating teachers. Survey data was then
analyzed via linear regression analysis using the Statistical Package for Social Studies Version 15.0. Results of the analysis indicated the top three intrinsic reasons for teachers not seeking other employment is the ability to work with students, personal teaching efficiency, and job satisfaction. Extrinsic factors that increase retention are good students, positive school environment, and small class size. Further discussion of the research indicated that a statistically significant relationship exists between the satisfaction of the profession of teaching and teacher retention. No statistical significance was found between the satisfaction of the job responsibilities of teaching and the intent to remain.

On the contrary, Cha and Vogel (2001) found slightly different causes for teacher attrition. In Cha and Vogel’s study, the researchers used datasets from the Nation Center for Education Statistics (NCES) databases and analyzed the data using the structural equation modeling approach. Teacher Follow-Up Surveys (TFS) and School and Staffing Surveys (SASS) were collected from the NCES and separated into two categories of current teachers and former teachers. The study sample consisted of 4,156 teachers. Of the sample, 2,477 were current teachers and 1,679 were former teachers. Out of the 1,679 former teachers, 222 (or 13%) were found to have left teaching to work in occupations outside of education. Out of the sample of teachers, 77% were female and 82% were Caucasian. A four-point Likert scale ranging from one (strongly agree) to four (strongly disagree) was used for the study. Survey variables rated job satisfaction, salary, working conditions, and teacher professional development experiences. After data analysis, the researchers found that poor working conditions contributed the most to teacher attrition. The second cause for teacher attrition was low salary. Conclusions of Cha and Vogel’s study supported that teachers compensated with higher salaries produce lower attrition.
rate and perceived their working conditions positively, as opposed to teachers with a lower salary scale. Cha and Vogel suggest that there is a correlation between salary and working condition perception in that higher pay compensation helped to deliver better working conditions. While the trend between perceived working conditions and perceived salary is significant, further analyses from the researchers suggested that workplace conditions also could be controlled by the administration of a school. The data suggested that teachers perceived a higher rate of dissatisfaction due to poor workplace conditions. Job satisfaction and teacher development programs were considered to positively decrease teacher attrition.

Not only does job satisfaction affect high school teachers’ intent to leave, but also according to Rosser (2004), college teachers are affected by a similar phenomenon. In a quantitative study, Rosser examined midlevel college leaders and teachers to determine the quality of work life, job satisfaction, morale, and the intent to retain employment. A sample of 4,000 midlevel teachers and leaders were selected and surveyed using a modified satisfaction and exit survey used by two university systems in the United States. The survey used a Likert five-point response format. Surveys were then analyzed using M-Plus Version 2.13 software. Results indicated that low morale of midlevel leaders resulted in a 25% increase on intent to leave. Midlevel personnel decrease in satisfaction resulted in a 39% increase on intent to leave. Further research was suggested to detail the causes of demoralization and job satisfaction decrease with intent to leave. As exemplified by Rosser’s study, the intent to leave, or the basal cause of voluntary attrition, was primarily from low morale and low job satisfaction. These results support the problem statement of this teacher and non-teacher job satisfaction study in which the
persuasion to change careers or leave one’s chosen teaching field is due to low job satisfaction.

Other causes of teacher dissatisfaction and possible attrition were found when Weiqi (2007) performed a quantitative study on 230 Chinese school teachers to determine what effect job satisfaction has on attrition and work enthusiasm. Participants were measured using a researcher developed a seven-point Likert scale questionnaire. Results indicate that the major contributors to teacher dissatisfaction are student quality, leadership problems, work achievements, working conditions, and pay. These factors, when perceived negatively, had a direct negative effect on teacher satisfaction. When teacher satisfaction was lowered, a direct relationship was seen in intent to leave. Of the sample, 26.5% of teachers would leave their current position if pay were not satisfactory. Ten percent responded saying that increasing workload requirements were the reason for leaving. Twenty-one percent intended to leave due to low social status in the community. Weiqi’s study links job satisfaction and teachers intent to leave directly, which is a key factor in the importance of studying teacher job satisfaction. Furthermore, the results of Weiqi’s study indicated that monetary compensation and social status is a factor in teachers who remain in the vocation.

Additional factors such as policy and evaluation procedures can also cause teacher attrition rates to increase. Winters and Clowen (2013) studied the policy and procedure relationship to determine if a value based system of teacher evaluation and retention would be better suited than a policy driven system of teacher evaluation. In a policy driven system, teachers are relieved of service if they have consecutive low performance ratings. A value system evaluation takes into account average evaluation
scores and allows for less teacher turnover. Results of the study showed that the value system evaluation model resulted in a significantly less turnover rate, and thus less teacher attrition. Results indicated the policy driven system, which is the contemporary method of standard operative practice in the United States, resulted in more teacher turnover and added to the overall attrition rate of teachers (Winters & Clowen).

Another factor that may affect teacher attrition rate is that of perceptions and expectations of career paths within the educational profession. Margolis (2008) performed a qualitative study on four to six year teachers to determine the perceptions these teachers had regarding their career path and retention of employment. Seven teachers in the Pacific Northwest school district participated in a program designed to stimulate teacher development. Interviews were completed at the beginning and end of the development program. A comparative analysis methodology was then used to analyze the data via coding. Results indicated that teachers, in their fourth to sixth year of teaching, look for regenerative types of professional development. Results also indicated that male teachers sought administration responsibilities for their future career while female teachers desired to become teacher educators. If teachers with such career expectations fail to meet their goal, a career change may occur.

From the review of the literature on teacher attrition, it is apparent that job satisfaction, or dimensions that factor into the dynamic of job satisfaction, are a major cause of teacher attrition. While this study focuses on the job satisfaction of teachers in a suburban high school, the purpose of this study is to offer data as an insight into what teachers value and what teachers find rewarding. To accomplish this task, job satisfaction of education workers must be understood through current literature and study.
Job Satisfaction

According to Strunk and Robinson (2006), the primary cause of teacher attrition is a decrease in job satisfaction. Strunk and Robinson’s (2006) conclusion is significant because it exemplifies the importance of job satisfaction studies centered on improving teacher retention. By studying job satisfaction and the factors that affect teachers, the educational system in America can start to help retain qualified and experienced teachers.

In a study by Alzaidi (2008), researchers conducted a mixed method approach to determine the factors that affect job satisfaction of head teachers and follower teachers was performed on Saudi Arabian schools. A researcher developed qualitative interview format was administered prior to development of the quantitative survey. Surveys were created from qualitative responses. Eighty-four head teachers and 20 follower teachers were surveyed, using a five-point Likert scale questionnaire to obtain quantitative data. Data was organized using NVivo Statistical Software. Results indicated that head teachers were the most dissatisfied with school environment factors and relationship with administration. Those factors that resulted in head teachers’ dissatisfaction were a perception that their salaries were not significantly more than teachers with less rank and that their power to discipline follower teachers was low. Follower teachers’ data suggest that poor relationships with administration and head teachers affect their morale negatively. The results of Alzaidi’s study show a further relationship between teacher compensation and job satisfaction. A further connection between follower and leader teacher relationships with administration is a significant factor affecting job satisfaction. The data of Alzaidi’s study suggested that teachers, regardless of rank or job title, have similar reactions to job satisfaction dimensions.
In a similar study focusing on administration and teacher job satisfaction, Balkar (2009) studied the effect of principal behavior on teacher morale in the Adana province in Turkey. Fifty-two teachers from primary schools were surveyed by open-ended questions related to perceived principal behavior. Evaluative analysis technique methodology was applied to analyze the responses of teachers. Balkar’s technique sought key words in the open-ended responses, and categorized those responses into 16 categories. Results indicate that 46 teachers perceived their job as satisfying if principals appreciated their work. A decrease in job satisfaction was reported by 73 teachers in response to a principal’s behavior that was not reassuring in nature. Thirteen teachers reported an increase in job satisfaction if the principal was perceived as funny or humorous. The funny perception of attitude led the teachers to believe the principal as personable. Balkar concluded that further study must be completed in determining the needs of teachers so administrative personnel could be better trained. Through better training of principals, negative administrative behaviors can be avoided and an increase the overall job satisfaction of teachers under their command can be had. In the Balkar’s study, the relationship between administrative behavior and teacher job satisfaction is exemplified.

To examine the dynamic of administrator background on teacher job satisfaction, Shen, Leslie, Spybrook, and Ma (2012) performed a quantitative study on principals’ educational background and work experience to determine if these things have an effect on job satisfaction for teachers. Data from the Nation Center for Educational Statistics was used for both principal background and teacher job satisfaction. A sample of data from 7,670 principals and 40,770 teachers were used. Results indicated that background between the teacher and the school accounted for 22% variance affecting job satisfaction.
Principal background accounted for 4% of the teacher job satisfaction variance. Furthermore, it was shown that a 43% increase in job satisfaction was seen if the participating teacher perceived the school's process, or the method in which the school supports the teacher, as good. The results indicate that the behavior of the administration, such as similarly studied by Balkar (2009), is a more significant determinate in job satisfaction for teachers than background or educational achievement.

While administrative behavior affects teachers' job satisfaction, would other possible factors of job satisfaction such as age, gender, and race cause differences in job satisfaction. In a study by Chaudhry (2012) researchers quantitatively studied a Pakistani university to determine the effects of age, gender, nature of the job, and work experience on job satisfaction. Six universities, three private and three public, were selected for the study. Five hundred teachers were randomly chosen as participants. A professional life stress scale developed by the British Physiological Society was used to measure stress. Results indicated that there was no significant correlation between job stress and job satisfaction in public universities. In private universities, an inverse relationship was found between job satisfaction and occupational stress. Other factors of age, gender, and work experience resulted in no correlation toward or against job satisfaction. Future research was suggested by the author to investigate the cause of high stress job environments and decreased job satisfaction in other venues outside of the study’s population of universities. Although Chaudhry’s study resulted in no correlation between job satisfaction on race, gender, and age among teachers, the results indicated that high stress environments decrease overall job satisfaction.
In a quantitative longitudinal study on western Australian high schools, Young (1999) surveyed 212 high school teachers concerning their perception of the school and management. Questions asked contained components of school environment, morale, and organizational health of the school. Researchers developed a multilevel model to determine the effect the components had on morale. Results of the study determined that a positive school environment increased job satisfaction level by 54%. Data also suggested that if teachers perceived that the school was improving, morale increased. Implications of the study concluded that to increase teacher morale, school improvement efforts must be made, as well as a change toward a positive school culture. By improving teacher morale and school culture, school health, performance and job satisfaction increases as a result.

In a contradictory study, Griffin (2010) conducted a quantitative job satisfaction study on 178 Jamaican and Bahamian teachers, 148 or 83.6%, which were female, and 30 or 16.4% were male. The purpose of Griffin’s (2010) study was to determine if gender had a significant role in job satisfaction. Participants completed the Teacher Motivation and Job Satisfaction Survey used by Jamaican Public Schools. Results indicated that 81 or 46.4% of the teachers responded as satisfied with their current employment. Male teacher surveys showed a 3.2% higher job satisfaction level than female teachers. Further analysis of the surveys discovered that teachers who had positive working relationships with administration showed higher job satisfaction levels. Opportunity for potential advancement was also a positive motivating factor. While future research was suggested by the author to investigate the causes for the difference between male and female
teachers satisfaction, the results do show a significant difference between male and female teachers, which contradicts Chaudhry’s (2012) study.

Similar to Griffin’s (2010) study on the correlation between job satisfaction of teachers and culture, Renzulli, Parrot, and Beattie (2011) quantitatively studied the effects of school type and racial mismatch on job satisfaction. Teachers and students of opposite races were included from both traditional schools and charter schools. Data was taken from the 1999-2000 Schools and Staffing Survey and the Teacher Follow-Up survey. The sample of teachers included 2,210 traditional school teachers and 560 charter school teachers. Data from the surveys between charter and traditional schools were separated and charted. Results indicate that white teachers were 10% more satisfied than black teachers were. Teachers in charter schools were determined to be an average of 4% happier than those teachers in traditional schools, regardless of race. White teachers in a charter school showed a significant decrease in satisfaction when mismatched with black students. Traditional school differences of racial mismatch were not significant. Data further indicated that charter school teachers were 2.75 times more likely to leave their current position and 2.75 times more likely to leave teaching altogether.

Administrative gender differences can also affect teacher job satisfaction according Saeed et al. (2011). Saeed et al. developed quantitative correlational descriptive research methodology, which was used to determine the effect of female principals’ management style on teacher job satisfaction. A sample of 150 Iranian teachers was chosen from public schools and surveyed using two researcher created surveys. One survey examined management styles and the other examined job satisfaction. Both surveys used a five-point Likert scale. Results indicated that 96
teachers responded positively toward executive management styles while 92 teachers also believed that developer management increased job satisfaction. Only 33 teachers responded positively to autocratic leadership. The authors suggest that further investigation into the correlation of management style and job satisfaction among teachers be performed on mixed gender principal populations.

According to Weiss, Dawis, England, and Lofquist (1967) working conditions are a factor in determining a workers job satisfaction. While teachers are not typically forced to work in industrial like conditions, the environment of the job does factor into their overall job satisfaction. To address the dynamic that working conditions and student disciplinary problems effect teacher job satisfaction Houchins, Shippen, McKeand, Veil-Ruma, and Gaurino (2010) conducted a quantitative study to determine job satisfaction of Ohio, Georgia, and Louisiana special education teachers working in the juvenile justice system. Five hundred and forty-two teachers from correctional facilities completed a modified Working in Special Education survey. Special education and general education teachers were included in the sample. Results of the surveys indicated that special education teachers who worked in long-term incarceration schools had a significantly lower job satisfaction rate than those special education teachers who work in short term incarceration facilities. Female special education teachers indicated lower job satisfaction when working in educational correction facilities compared to general teachers in the same type of facility. Male general education teachers’ job satisfaction was relatively consistent regardless of facility type. Future research was suggested by the authors to investigate the factors that affect the difference between special education and general education teachers’ satisfaction in juvenile justice systems. The results of
Houchins et al. study suggested that male and female teachers’ job satisfaction differs concerning workplace conditions. According to Houchins et al. (2010), female teachers may be more prone to job dissatisfaction than their male counterparts may. Furthermore, Houchin’s et al. study suggests that a relationship dynamic between the teachers and the student may account for a significant change in job satisfaction levels among teachers.

Houte (2006) examined the dynamic between job satisfaction and student/teacher relations in a quantitative Flemish study, in which a multilevel analysis of 711 teachers and 3,760 pupils from 34 different schools were analyzed for job satisfaction. Teachers were given a 12-item survey and were required to answer questions on a zero to four scale. Pupils were given an 11-item survey and required to answer on a zero to five scale. Results were analyzed and separated into two groups: vocational and general schools. Results were then compared between the two types of schools. Results indicated that teacher satisfaction was 3.59% higher in traditional schools than vocational schools. Students in a general type school were 2.17% more satisfied with the study culture compared to students in vocational schools. Discussion of the results state that there should be more research performed to determine if the relationship of student and teacher satisfaction with school type is a trend. Houte also suggested that the aspect of trust in the classroom be tested as a variable. Trust of students toward teachers was seen in Houte’s study, although results were not significant. While the intent of Houte was to investigate teacher/student relationships on job satisfaction, the results indicated that teachers tend to be slightly happier in traditional schools. While the results do not support Houchin’s et al. (2010) suggestion that positive teacher and student relationships increase teacher job satisfaction, it does present a possible variable in teacher job satisfaction.
In a study by Huysman (2008), a rural Florida school was analyzed to determine the beliefs and attitudes affecting job satisfaction of teachers. Eighty-five teachers were chosen to be participants in a study. A mixed methods survey was conducted using written response surveys, MSQ, and the Rural Teacher Satisfaction Survey. Qualitative data was collected from administration using written response open-ended questioning and recorded audio during interpersonal interviews. Results of the qualitative portion of the study indicated that teachers who were the most satisfied in their position felt that the relationships with the student, daily work task, and creative challenges were factors that contributed positively to their morale. During the course of the study, 22% of the participants left the district due to poor relationships with administration. All transplanted teachers, teachers who did not originate from the rural area, indicated that they were planning to leave the district in five years. Transplanted teachers also responded 31% lower on satisfaction rate than local teachers. The significance of Huysman’s study is that the results support Chaudhry’s (2012) conclusion that poor administrative/teacher relationships result in lower teacher job satisfaction, and thus more attrition. Furthermore, Huysman concluded that transplanted teachers, or those teachers who came into a rural setting from an urban setting, were more likely to leave than native rural teachers, thus presenting a further variable in teacher job satisfaction.

Another possible explanation for reduced job satisfaction among teachers is the expectations of the vocation, as well as the time committed to service in the education field. Inman and Marlow (2002), in a quantitative study on Georgian schools, examined the attitudes of beginning teachers who remain in the profession to determine why these professionals retained their current employment. One hundred teachers in Georgian
schools from K-8 were surveyed using the Professional Attitude Survey approved by the Georgia State Board of Education. Of the teachers participating in the survey, 47% had fewer than four years experience, and 53% had fewer than 10 years experience. Surveys were analyzed and results were divided between phase one teachers, teachers with less than four years experience, and phase two, those teachers with experience between four and ten years. Results showed that 50% of phase two teachers believed that salary compensation was fair and only 27% of phase one teachers believed salary was fair. Furthermore, 50% of phase two teachers believed that working conditions were good, while only 33% of phase one teacher believed that working conditions were adequate. On the contrary, 58% phase one teachers believed that the prestige of teaching was as expected, and 41% of phase two teacher reported the prestige as suspected. The results indicate that phase two teachers are relatively happier, possibly due to the longer time in the vocation, than teachers within their first four years are. The difference in phase two versus phase one teachers could be one factor that accounts for 50% teacher exodus within the first four years as found by Norton (1999). However, the question remains if job satisfactions of those teachers who retain employment increase after the four year mark, or if the more satisfied teachers simply stay within the educational vocation.

To determine if historical changes in teacher job satisfaction have occurred, Klassen and Anderson (2009) completed a quantitative comparison of factors that affect teacher job satisfaction between 1962 and 2007. Two-Hundred ten teachers in England were surveyed using a modified five-point Likert scale. Surveys consisted of three main questions regarding job satisfaction. Further questions focused on 16 sources of job dissatisfaction and required the teachers to rank each accordingly. Results of the 2007
survey were then compared against results from a 1962 survey. Results indicate that in 1962 the main causes of dissatisfaction were low salary and poor human relations. The 2007 survey indicate that dissatisfaction arose primarily from lack of time for lessons and pupil behavior. Pupil Behavior took the most significant change from being ranked 16th to 2nd in reasons for dissatisfaction. These findings support the theory that student/teacher relations account for a significant part of job satisfaction among teachers. These results suggest Houchin’s et al. (2010) findings that positive student/teacher relationships increase job satisfaction of the respective teacher.

Klassen, Usher, and Bong (2010) quantitatively examined Teacher Collective Efficiency (TCE), job stress, and culture effect on job satisfaction. Five hundred teachers from Canada, Korea, and the United States were surveyed to measure collective efficiency, job stress, and job satisfaction. Efficiency was measured with a 12-item survey Collective Teacher Efficacy Belief Scale (CTEBS) while job satisfaction and stress were measured using a four subject, nine-point Likert survey. Results were determined using multi-group path analysis. Results indicated that increased teacher job satisfaction created an increase in teacher efficiency. Lower job stress also resulted in a positive correlation in increasing efficiency. A total increase of 22% efficiency was determined in North American teachers while a 38% increase in efficiency was found in Korean teachers when job stress was determined to be low and job satisfaction high. Cultural difference appeared to have an effect, but exact correlation between variables is not understood.

Working conditions can also factor into overall job satisfaction and morale of teachers. Mackenzie (2007) examined factors that affected morale in Australian schools
using a mixed methods methodology. Questionnaires, surveys, and individual interviews were conducted on 101 primary and secondary school teachers over a year time period to measure the perceived causes of morale decliners. Qualitative responses were categorized into nine response categories. Results from the qualitative study were then used to develop a unique quantitative survey. Results of the quantitative study indicate that 56 out of 101 teachers believe that poor working conditions had the biggest negative effect on morale. Low pay caused 39 out of 101 teachers to rank these categories as a demoralizer. Results also indicated that 66% of teachers surveyed perceived morale to be decreasing. While morale is considered to be more intrinsic than job satisfaction, morale adds to the dynamic of job satisfaction and could have an effect on job satisfaction score due to poor working conditions. Working conditions effect on job satisfaction could be a possible variable in a job satisfaction study.

While working conditions affect teacher morale and job satisfaction, principal succession can also manipulate levels of teacher job satisfaction. Meyer, Macmillan, and Northfield (2009) conducted a qualitative study in Nova Scotia on two secondary schools that experienced principal succession within the last five years. Thus, the schools were examined to determine how principal succession affects teacher morale. The researchers conducted interviews in 30 to 45 minute sessions. Teachers and principals were interviewed for responses in the topics of school culture, morale, and attitude toward change. Responses were coded and analyzed for trends. Results of Meyer et al. study indicate that during principal succession, informal leaders and prior principal popularity were perceived to have a significant effect on teacher morale. In cases where informal leaders were thought to be competent, teachers believed that their morale was higher. In
cases that involved the succession of a respected and liked principal, the teachers’ responses supported a decrease in morale. Researchers believe administrative attrition or succession plays a large role in determining teacher job satisfaction, and thus retention within a particular school district.

According to Strunk and Robinson (2006), teacher stress can lead to decreased job satisfaction, and thus increase the teacher’s willingness to leave their chosen profession. Platsidou and Agaloitis (2008) studied the burnout of special education teachers quantitatively in Greek schools. A sample of 127 special education teachers was surveyed using the Maslach Burnout Inventory, the Employee Satisfaction Inventory, and the Inventory of Job-Related Stress. Surveys were then analyzed using Scheffe’s test and eta-square values. Results indicate that special education teachers have a relatively low level of burnout and a moderately high level of job satisfaction when compared to general education teachers. The highest level of burnout rate was found in 25 teachers that reported emotional burnout as the main cause. Perception of high personal achievement resulted in 96 teachers exhibiting low burnout and stress conditions. Teachers older than 40 who taught special education were also shown to have 15% less burnout on average compared to teachers younger than 40 years old. While Platsidou et al. examined special education teachers, a pattern involving all teachers is presented that indicated the possibility of older teachers exhibiting less burnout than younger teachers do. The age phenomenon suggests that age is a factor in teacher burnout, and possibly job satisfaction.

According to Persevica (2011) student achievement can also have an effect on teacher job satisfaction. In a quantitative study on job satisfaction of teachers in low and
high achieving schools, Persevica examined student achievement to determine what effect it may have on teacher job satisfaction. Forty-nine teachers from five high performing schools and six low performing schools were surveyed using the Teacher Job Satisfaction Questionnaire and the Education Quality Questionnaire. Four hundred and one pupils were also selected to complete the Education Quality Questionnaire. Surveys were then analyzed using a statistical program SPSS Version 19. Results indicate that the performance of student and high teacher job satisfaction are related. Results also indicated that salary and good student-teacher relations were perceived as job satisfaction increasers for teachers. A direct correlation between low-performing students and low teacher satisfaction was also found. The results of Persevica’s study suggested that low-performing school can create lower teacher job satisfaction; the results further indicate that low pay can also negatively influence job satisfaction.

Factors other than salary also have been found to affect teacher satisfaction, and thus retention. Rhodes, Nevill, and Allan (2004), in a quantitative study on English teachers, sought causes for teacher satisfaction were studied to better reduce teacher attrition. Three hundred and sixty eight teachers were surveyed using a specifically designated five-point Likert type survey that measured teacher satisfaction level and causes of satisfaction. Data was then separated into categories of satisfaction effectors. Results indicated that 364 teachers believed that working collaboratively with others to solve problems was the greatest cause for increase in job satisfaction. Three hundred and fifty three of the teachers surveyed rated workload stress the greatest demoralizer. The top three factors that were determined to lead to retention within the next five years of Rhodes et al. (2004) study were: 1. higher pay, 2. increasing the felt value of teachers in
the field, and 3. an intrinsic desire to help children. While high monetary compensation was found to increase teacher job satisfaction, thus supporting Persevica (2011), the dynamics of intrinsic motivation to help children adds a unique variable to teacher job satisfaction.

To determine if poverty affected teacher job satisfaction, Sargent and Hannum (2005) studied rural Chinese teachers in high poverty areas in a Northwestern Chinese quantitative study. Community and school environment factors were examined from 100 village leaders, 128 principals, and 1,003 teachers. Non-education participants were surveyed using the Gansu Survey of Children and Families, teachers and principals were surveyed using a researcher developed questionnaire. Results indicated that teachers working in more economically developed areas in rural China were significantly less satisfied. Satisfied teachers were found to live in small villages rather than teachers in small rural schools. Community factors did not present any significant effect on job satisfaction. The largest factor determined to affect job satisfaction in rural Chinese schools is timeliness of salary payment. While 77% of the teacher participants reported always having their pay on time, 90% reported that any delay in payment would significantly decrease their willingness to stay in the profession of teaching. The results of Sargent and Hannum’s study indicated that pay, or delay in payment, are a determining factor in job satisfaction among teachers. This phenomenon of dissatisfaction with pay shown in Sargent and Hannum’s is further supported in studies by Persevica (2011) and Rhodes et al. (2004).

Xiaofu and Qiwen (2007) quantitatively examined 1168 teachers in secondary schools in a Chinese school district. Using a local school district developed job
satisfaction survey Xiaofu and Qiwen measured teacher job satisfaction. Surveys were analyzed using Win 10.0 software. Results of the surveys were then divided into satisfied, intermediate, and dissatisfied categories. Categories of the nature of the dissatisfaction were also organized. Results indicated that 81.2% of dissatisfied teachers felt that material conditions of the school texts and instruments created a climate of dissatisfaction in their profession. A total of 63.8% of dissatisfied teachers also felt that lack of promotion caused a decrease in their morale. Thirty-two percent of satisfied teachers believed that the nature of their profession increased their morale. Furthermore, 59.8% of satisfied teachers perceived their wages as being the cause for their high job satisfaction. While the results supported Mackenzie’s (2007) conclusion that working conditions affect teacher job satisfaction, the correlation between higher pay and positive job satisfaction is also supported.

Governmental programs and requirements can further influence job satisfaction and morale of teachers. Byrd-Blake et al. (2010) conducted a mixed method analysis to measure how the No Child Left Behind Act of 2001 (NCLB) affected teacher morale in a southern Chicago suburban school district. Forty-two elementary and high school teachers were qualitatively surveyed using an open-ended response format to obtain their attitudes and beliefs toward their respective vocations. A quantitative survey was also administered using a one to six scale, one being negative, and six being positive to obtain statistical evidence. The results of the qualitative survey were then applied using the Fishbein’s Theory of Attitude Formation and Change model. Quantitative questions were asked in respect to present attitudes and beliefs, and those attitudes and beliefs of the participant six years prior to determine NCLB effect on morale over time. Results of the
study found a decrease in teacher morale from a mean score, on a scale of one to six, of 1.93 five years prior to a 1.14 mean presently. The decrease of 0.79 mean score was determined to be significant. Further results of the qualitative study showed a theme of dissatisfaction and frustration with regard to NCLB requirements. No statistical data for the qualitative surveys were given since open-ended responses were allowed. The results of Byrd-Blake’s et al. study showed the effect that NCLB has on elementary and high school teachers. While the qualitative analysis of Byrd-Blake’s et al. study gave no statistical support, it did reveal a theme of attitudes and beliefs regarding NCLB. However, the quantitative data did show statistical significance. It was also found that elementary teachers felt the pressures of NCLB affected them more negatively compared to high school teachers.

Ayan and Kocacik (2010), to determine the relationship between job satisfaction and personality types of Turkish high school teachers, sampled 482 teachers and administered a researcher developed Socio-Demographic Questionnaire and Job Satisfaction Survey. The socio-demographic questionnaire gathered personality data from the teachers while the job satisfaction survey obtained job satisfaction levels. Thirteen personality characteristics were included in the personality questionnaire. Analysis of teacher job satisfaction was completed using IBM’s Statistical Package for the Social Sciences software package. The analysis grouped teachers into two groups, satisfied and unsatisfied. The two groups were then compared to each other according to responses submitted on the characteristics questionnaire. Results of the survey indicated that of the teachers that responded as satisfied, 84%, or 405 satisfied teachers thought of themselves as punctual. A total of 77%, or 371 satisfied teachers responded that their personal
competence was an important quality to have. Additionally, the quality of ambition was rated important by 76%, or 366 satisfied teachers. Researchers concluded that the characteristics such as punctuality, ambition, and competence are correlated significantly with highly satisfied teacher in Turkish high schools. Results for dissatisfied teachers indicated that 294 teachers were impatient and 347 teachers were quickly agitated. Researchers concluded that easily agitated and impatient teachers tended to be significantly less satisfied.

The results of Ayan and Kocacik’s (2010) study support a significant correlation between three key personality characteristics (punctuality, ambition, and competence) and positive teacher satisfaction. The authors believed that the positive correlation between characteristics and high teacher job satisfaction is due to the ability of the teacher to adapt quickly and be productive in a high school setting due to these characteristics. Those teachers who did not perceive these three characteristics as important may have had more difficulty adapting to the environment of a high school. Another possible explanation was that the teachers with these characteristics were more influential over their workplace environment, and thus conformed the environment to their needs. The conforming process possibly increased the satisfaction of the influential teacher. The correlation of dissatisfied teachers with easily agitated and impatient personalities was found to be significant. The characteristics of dissatisfied teachers were believed to be incompatible with the environment and responsibilities of teaching, which in turn caused a decrease in overall job satisfaction leading to dissatisfaction, and thus possible attrition.
The Minnesota Satisfaction Questionnaire (MSQ) was developed by Weiss, Dawis, England, and Lofquist in 1967 to quantitatively measure job satisfaction. The original survey included 100 questions on a five-point Likert scale. Each question aligned with one of the 20 dimensions of job satisfaction as determined by Weiss et al. The 20 dimensions measured by the MSQ are as follows: Ability utilization, achievement, activity, advancement, authority, company policies, compensation, co-workers, creativity, independence, security, social service, social status, moral values, recognition, responsibility, supervision-human relations, supervision-technical, variety, and working conditions. These dimensions represent extrinsic and intrinsic values that determine an employee’s job satisfaction. Extrinsic values of the MSQ are considered to be advancement, company policies, compensation, co-workers, recognition, supervision-human relations, supervision-technical, and working conditions dimensions, while intrinsic values are considered to be ability utilization, achievement, activity, authority, creativity, independence, security, social service, social status, moral values, responsibility, and variety. Each of these dimensions factor into the overall job satisfaction score, as well as intrinsic and extrinsic determinations.

Due to the length and time requirements of the MSQ, which required approximately 20 minutes to complete, Weiss, Dawis, England, and Lofquist (1977) developed a shorter, more direct version of the survey called the Minnesota Satisfaction Questionnaire Short Form (MSQ-SF). The MSQ-SF included 20 questions in a five-point Likert form. The each question represents one of the 20 dimensions as mentions by Weiss...
et al. Use of the MSQ-SF is recommended for large sample sizes or for use in populations that may result in lower completion rate due to job constraints.

The versatility of the MSQ is exemplified in its use in contemporary literature. Strydom, Nortjé, Beukes, Esterhuysen, and Westhuizen (2012) studied South African schools quantitatively to determine the current level of job satisfaction among special needs teachers. A sample of 101 special needs teachers was taken and surveyed using the five-point Likert scale MSQ. Results of the surveys indicated that 25% of the teachers believe that job satisfaction is affected by lack of discipline of learners in the classroom. Twenty percent of the teachers surveyed believe that lack of support from the governmental Department of Education was the cause for job satisfaction decrease. Large or overcrowded classes accounted for 16.6% of the influence over teacher job satisfaction.

While the MSQ is used in education, it can also be used in both the private and public sector of industry as well. In a study designed by Wang, Yang, and Wang (2012) researchers implemented a quantitative study on Taiwanese employee job satisfaction and turnover rate to test public and private sector health, using the MSQ. A sample of 500 workers from the private and public sector were surveyed using a Chinese version of the MSQ to test job satisfaction. Intent to leave employment was tested with a researcher developed five-point Likert scale survey consisting of four questions. Results of the study indicated that public sector employees generally have lower extrinsic job satisfaction than private employees. Public sector employees also showed a negative correlation of intent to leave compared to job satisfaction. While public sector employees’ job satisfaction levels were significantly lower than those of private sector employees, public sector
employees were less likely to leave. Wang et al. results indicated the MSQ can be used in correlation with other surveys to determine dynamics not found on one particular survey.

An example of how the MSQ can be used in correlation with other surveys in education is shown in Holcomb-McCoy and Addison-Bradley (2005) study. Holcomb-McCoy and Addison-Bradley completed a quantitative analysis on African American counselor teachers’ job satisfaction to determine what effect racial climate has on job satisfaction. A sample of 48 African American counselor teachers was surveyed using the Minnesota Satisfaction Questionnaire Short Form (MSQ-SF) and Watts and Carter Racial Climate Scale (RCS). The MSQ-SF measured job satisfaction on a scale of 20-100, while the RCS measured opinions of employees related to race and racial issues in the workplace. A high score on the MSQ-SF indicates high job satisfaction while a high score on the RCS indicates a negative racial climate in the workplace. The MSQ-SF resulted in a mean job satisfaction score of 68.08 out of 100 possible points. The data suggested that the mean score was rated as satisfied to very satisfied with their employment according to the MSQ-SF. The highest satisfaction scores were seen in the area of ability utilization, or the employees’ perception that their specific skills are being used. The lowest scores, or the lowest levels of job satisfaction, were seen in the subjects of pay and company policies. A mean score of the RCS was determined to be 57.06, on a scale of 18-90, indicating a moderate negative racial climate. The highest score, which indicated a negative racial climate, indicated that Caucasian teachers had a similar difficulty in earning promotions as African American teachers did. The lowest score, or the most positive racial climate response, indicated that African American teachers had an influence over decisions made in the workplace. The results of Holcomb-McCoy and
Addison-Bradley’s study illustrated the correlation between racial environment and job satisfaction may not be directly related. Job satisfaction levels of the teachers were relatively high according to the MSQ-SF at the same time negative racial climate was high. According to the authors, the correlation of low racial climate and high job satisfaction are not directly related as first thought due to the inverse relationship shown in the data. While Holcomb-McCoy and Addison-Bradley’s study focused on counselor teachers, rather than obligate classroom teachers, the versatility and compatibility of the MSQ use in the education field is exemplified by Holcomb-McCoy and Addison-Bradley’s study. In summary, the MSQ use in the educational field is justified for teaching staff and non-teaching staff due to the precedents set by Holcomb-McCoy and Addison-Bradley, as well as for use in fields outside of education as exemplified by Wang et al. (2012).

Summary

While many factors appear to affect teacher job satisfaction, the focus of this study is to determine if teachers’ job satisfaction truly differs from the job satisfaction of other workers in the field. While variables such as pay, working conditions, student/teacher relations, and administrative relations all factor into teacher satisfaction, understanding more of the dynamic of how the dimensions of job satisfaction, as measured by the MSQ-SF, effects teachers, and thus attrition. Furthermore, the shortage of job satisfaction studies concerning teachers in the United States presents a void for unique research studies such as this. With further study into job satisfaction, and how it
affects teacher attrition rate, the problem of teacher exodus out of the educational field can be better understood.
CHAPTER III
METHODOLOGY

Introduction

In chapter two of this research, literature pertaining to job satisfaction and teacher attrition was examined to determine if a link between job satisfaction and attrition occurs. Since the problem statement of this research is focused around the phenomenon of teacher attrition, causes of this attrition were examined in detail. The outcome of the literature research determined that job satisfaction is the primary reason for teacher exiting the field of education permanently.

Chapter three of this research will focus on the research design, population and sample, data collection, and limitations found in this study. The goals of this study are to answer three questions pertaining to teacher and non-teacher job satisfaction;

1. How does overall positive or negative non-teaching staff job satisfaction compare to overall teacher job satisfaction?

2. How does extrinsic or intrinsic non-teaching staff job satisfaction compare to extrinsic and intrinsic teacher job satisfaction?

3. What dimensions do teaching staff and non-teaching staff find important in determination of job satisfaction?
Research Design

The basic design of this research was quantitatively quasi-experimental and included multivariate statistical and descriptive analyses components of job satisfaction dimensions. All participants in this study were selected using a convenience sampling technique due to the specific questions being asked of this study and for the predetermined job positions being used in this study. (Leedy & Ormrod, 2012) Since the sample size of this study is large, a quantitative methodology was used. (Gay, Mills, & Airasian, 2012; Salkind, 2011) The purpose of this research was to examine the differences between teaching and non-teaching staff. Teacher and non-teaching staff represent two levels of the independent variable job position, while overall job satisfaction, intrinsic job satisfaction, and extrinsic job satisfaction represent the three dependent variables. Dependent variable data was collected using a purchased and validated survey from the University of Minnesota called the Minnesota Satisfaction Questionnaire Short Form (MSQ-SF). The MSQ-SF, when used to measure job satisfaction exhibits a reliability factor of $\alpha = .88$ with a construct validity. (Weiss et al, 1967) The MSQ-SF is a versatile instrument for measuring job satisfaction in a variety of career fields. Since teachers and non-teaching staff job satisfaction levels were being compared on the same scale, the universality of the MSQ-SF was ideal, and required, for both levels of staff. (Holcomb-McCoy & Addison-Bradley, 2005) Data gathered from the survey included demographic information for age, job position, and sex. Quantitative data measured by the survey included overall job satisfaction score, extrinsic job satisfaction score, and intrinsic job satisfaction score. Individual job satisfaction dimensional ratings were also collected, as these are obligatory in determining the previously mentioned job
satisfaction parameters. Collection of the dimension scores was needed to reach the goals of the research and thus describe the dimensional ranking of job satisfaction components of teaching and non-teaching staff.

Measures

The instrumentation used to collect job satisfaction data from the participants in this study was the MSQ-SF. The MSQ-SF was able to measure teacher and non-teacher job satisfaction on an ordinal scale of 20 to 100. Scores below 25 are considered low job satisfaction, between 25 and 75 moderate job satisfaction, and above 75 are considered high job satisfaction ratings. According to Holcomb-McCoy and Addison-Bradley the MSQ-SF survey allows the researcher to analyze 20 factors pertaining to job satisfaction of the participants of interest. The 20-question short form version of the MSQ promotes a higher response rate than the original 100-question MSQ (Holcomb-McCoy & Addison-Bradley, 2005). The MSQ-SF measures 20 dimensions of job satisfaction quantitatively on a five-point Likert scale of 1-5. A dimension score of one is considered the lowest possible report and five the highest report. The 20 dimensions of job satisfaction which the MSQ-SF examines are as follows: Ability Utilization, Achievement, Activity, Advancement, Authority, Company Policies, Compensation, Co-workers, Creativity, Independence, Security, Social Service, Social Status, Moral Values, Recognition, Responsibility, Supervision-Human Relations, Supervision-Technical, Variety, and Working Conditions. Intrinsic factors measured by the MSQ-SF include Ability Utilization, Achievement, Activity, Authority, Creativity, Independence, Security, Social Service, Social Status, Moral Values, Responsibility, and Variety. Extrinsic factors measured by the MSQ-SF are Advancement, Company Policies, Compensation, Co-
workers, Recognition, Supervision-Human Relations, Supervision-Technical, and Working Conditions. Each dimension is measured by a dedicated question designed specifically to be reliable in that particular job satisfaction dimension. Furthermore the MSQ-SF has a reliability score of $\alpha = 0.88$ and construct validity, which makes it a viable choice when measuring job satisfaction levels in employees in all fields of study. (Weiss et al, 1967)

Population

The population for the study included teachers and non-teaching staff in a south suburban Chicago high school. The high school of study included approximately 150 teachers and 75 non-teaching staff. Teachers within the population included all individuals who taught two or more classes, while non-teaching staff included all staff working for the school in a non-teaching role. Non-teaching staff included principals, assistant principals, deans, counselors, and all maintenance and security staff. Since job position was predetermined, a true random sample or selection could not be performed. Therefore, all participants in this study were selected using a convenience sampling method, in which participants were divided into one of two groups based on their predetermined job position. Since job position could not be assigned, a true random assignment could not used, hence the necessity of using predetermined groups and assignment that the convenience methodology of sampling allows.

Data Collection

Data collection for the study occurred one time in October 2013 during an all staff event after school hours. At one week and 24 hours prior to implementation of this study, all staff was informed of the option to participant in the study via email. During the
collection event, the MSQ-SF was used to collect demographic data and job satisfaction data of both teaching and non-teaching staff. Demographic data included sex, age, years in service, and current job position. Job satisfaction data included responses from the 20 five-point Likert scale questions pertaining to job satisfaction. Of the population, 83 teachers and 42 non-teaching staff participated in the study. These participants accounted for 83% of the teachers and 56% of the non-teaching staff that were available in the population of the high school. When the surveys were distributed, all participants were required to sign an IRB consent form prior to participation in the study. Participants were then given a minimum of 15 minutes to complete the MSQ-SF. After completion, the surveys were collected using a drop box type of collection format, thus preserving confidentiality during collection and completion. Those individuals in that did not participate in the study did so for undisclosed reasons, and no participants were forced to participate.

Analytical Methods

To examine each goal of the research, different statistical methodologies were applied to examine of the research questions. In order to reach the goals of the research, the following was applied for each research question.

1. How does overall positive or negative non-teaching staff job satisfaction compare to overall teacher job satisfaction?

2. How does extrinsic or intrinsic non-teaching staff job satisfaction compare to extrinsic and intrinsic teacher job satisfaction?

The above listed questions were analyzed together using the following procedure: quantitative data was collected from teaching and non-teaching staff via the MSQ-SF.
Overall job satisfaction scores were totaled via IBM SPSS v.21 software (IBM Corporation, 2012) by summating of questions one through 20. Data for intrinsic and extrinsic job satisfaction was determined by aggregating specific questions from the MSQ-SF using SPSS v.21. (IBM Corporation) Intrinsic job satisfaction scores were calculated using 12 questions pertaining Ability Utilization, Achievement, Activity, Authority, Creativity, Independence, Security, Social Service, Social Status, Moral Values, Responsibility, and Variety. Extrinsic scores were determined by aggregating eight questions focused on Advancement, Company Policies, Compensation, Co-workers, Recognition, Supervision-Human Relations, Supervision-Technical, and Working Conditions.

Prior to any multivariate analysis, a Pearson correlation was performed to examine the relationship between the dependent variables of overall job satisfaction, intrinsic job satisfaction, and extrinsic job satisfaction. The results of the Pearson correlation were then analyzed to determine if a moderate positive correlation existed. For multivariate analytical methods to be robust, with the freedom to determine meaningfulness, especially with multiple dependent variables, the dependent variables should fall within a .20 to .60 correlation coefficient range. (Meyers, Gamst, & Guarino, 2006) If the variables correlate outside this range, a certain level of caution must be used when interpreting the meaningfulness of the results.

After performing correlational analysis on the dependent variables, overall job satisfaction scores for teaching and non-teaching levels statistically compared using a MANOVA analysis. The purpose of the MANOVA test was to reduce type I errors between the multiple dependent variables (overall satisfaction, extrinsic satisfaction, and
intrinsic satisfaction), while examining for statistically significant differences between groups. (Cramer & Bock, 1966) Since a statistically significant difference was indicated in the results of the MANOVA, subsequent between groups Analysis of Variance, or ANOVA, was performed to determine where the significant difference occurred. Post-hoc analyses were not performed due to the presence of only two independent variables in the study.

3. What dimensions do teaching staff and non-teaching staff find important in determination of job satisfaction?

Data from the MSQ-SF was collected and entered into IBM SPSS v.21 software for analysis. (IBM Corporation) Descriptive statistics were used to calculate the aggregated mean dimension scores for both teaching and non-teaching groups. Once mean dimension scores were calculated, scores for the respective dimensions were ranked for both teaching and non-teaching groups.

Limitations

The most significant limitation of this study was the access to a representative sample of teachers and non-teaching staff. The participants involved in this study were conveniently chosen from one high school’s population. While the sample size is respectable, the ability to examine the phenomenon of this study in other school districts limits the conclusive ability of the results. While certain conclusions may be able to be made, the results only indicate the job satisfaction climate of one high school. Time and resource constraints further limited the ability to seek further populations and instruments. With more resources and time, multiple school districts, as well as multiple job satisfaction instrumentation, further findings of this research could be reached.
One of the main reasons for the limitations to one school district is simply politics. Education, while being a stable form of employment for many, yields itself to a certain political environment due to the presence of faculty association. The presence of these associations tends to make the approval of research difficult to obtain. Since faculty associations are formed to protect the faculty from extreme actions of the administration in power, at times the representative can be very cautious in allowing any study that may endanger the employment of the faculty. However, this research was allowed due to a supportive and curious faculty association, but when further expansion of the research was attempted in other districts, permission was met with denial. While the understanding faculty association did not limit this particular study, the presence of a reasonable governance body could factor into the results of this study.

A further limitation in this study was the diversity of non-teaching staff participation in this study. Typically, diversity in a sample group is desired, but since predetermined groupings were required for the investigation of teaching and non-teaching variables, the lack of diversity with this methodology could affect the results. Since non-teaching staff include a variety of job positions and educational levels, thus adding confounding variable effects to the study, caution must be used when interpreting the results. While limited diversity among job responsibilities is found in the teaching group, a large and more complex set of job responsibilities, and thus possible job satisfaction, could be to account for any differences. Future accommodations for this limitation would be to gain access to a more diverse population, such as a school outside the public realm.
CHAPTER IV
FINDINGS AND CONCLUSIONS

Introduction

In the previous chapter the research design and statistical methodology of this study was outlined. Use of a MANOVA was required to analyze the dependant variables of overall job satisfaction, intrinsic job satisfaction, and extrinsic satisfaction. Furthermore, uses of descriptive statistics were used to determine the highest and lowest scoring dimensions between each surveyed group.

In Chapter Four of this research, the findings, conclusions, and ramifications of the resulting data will be addressed. The goals of this study are to answer three questions pertaining to teacher and non-teacher job satisfaction;

1. How does overall positive or negative non-teaching staff job satisfaction compare to overall teacher job satisfaction?

2. How does extrinsic or intrinsic non-teaching staff job satisfaction compare to extrinsic and intrinsic teacher job satisfaction?

3. What dimensions do teaching staff and non-teaching staff find important in determination of job satisfaction?
Findings

The following is analytical organization of statistical methods used to answer the respective listed research questions. All statistical calculations were performed using IBM SPSS software v.21 (IBM Corporation, 2012).

1. How does overall positive or negative non-teaching staff job satisfaction compare to overall teacher job satisfaction? and 2. How does extrinsic or intrinsic non-teaching staff job satisfaction compare to extrinsic and intrinsic teacher job satisfaction?

All data was gathered using the MSQ-SF. Participants included in this study included 125 individuals, which included 83 teachers and 42 non-teaching staff from a high school population. Mean age of the participants was 37.8 years (Table 1). Distribution of gender was 48% (n = 60) males and 52% (n = 65) females (Table 2). Participants educational level included 72.8% (n = 91) with a Master’s level degree or higher, 10.4% (n = 13) with a college level degree, and 21% (n = 21) with a high school level of education (Table 3). Cronbachs Alpha results for the data indicated reliability of .734, indicating a robustly reliable instrumentation.

Prior to completing the multivariate test, a Pearson correlation was performed on the dependant variables between overall job satisfaction, intrinsic job satisfaction, and extrinsic job satisfaction. Results of the correlation indicated that overall job satisfaction was positively highly correlated with intrinsic job satisfaction and extrinsic job satisfaction, \( r = .85, n = 125, p < 0.01 \) and \( r = .81, n = 125, p < 0.01 \) respectably (Table 4). Correlation results between intrinsic and extrinsic job satisfaction was weak but significant \( r = .38, n = 125, p < 0.01 \) (Table 4). The high correlation between overall job satisfaction
satisfaction and intrinsic and extrinsic job satisfaction indicates that caution must be taken when analyzing a multivariate test, however the weak positive correlation between intrinsic and extrinsic job satisfaction allows freedom of multivariate measures (Meyers, Gamst, & Guarino, 2006). Since intrinsic and extrinsic job satisfaction are essentially sub-scales of overall job satisfaction as measured by the MSQ-SF, a high correlation is to be expected.

After implementation in the Pearson correlation was completed, a one-way MANOVA was performed on means of overall job satisfaction, extrinsic job satisfaction, and intrinsic job satisfaction dependent variables (Table 5) as measured by the Minnesota Satisfaction Questionnaire Short Form (MSQ-SF). Since multiple dependent variables exist, measured all measured via the MSQ-SF, the MANOVA analysis method protects against type I error rate increases (Cramer & Bock, 1966). The MANOVA test yielded a significantly significant result, Pillais’ Trace = .069, $F (2, 122) = 4.49, p = .013$; partial $\eta^2 = .069$ (Table 6).

Prior to follow-up test, Levene’s test was examined for statistical significance; however the Levene’s test showed no significance, thus indicating a homogeneity of variance assumption (Meyers, Gamst, & Guarino, 2006). A follow up series of ANOVA’s were then performed to determine the identity of the significant result. ANOVA results for overall job satisfaction scores for teaching (M = 73.9, SD = 12.6) and non-teaching staff (M = 69.3, SD = 11.1) indicated a significant difference $F (1,123) = 4.04, p = .047$; partial $\eta^2 = .032$ (Table 7). Results from ANOVA follow-up for intrinsic job satisfaction between teachers (M = 45.1, SD = 6.65) and non-teaching staff (M = 41.3, SD = 7.09) produced a statistically significant result $F (1, 123) = 8.69, p < .05$;
partial $\eta^2 = .066$ (Table 7). Meanwhile results from extrinsic job satisfaction between teachers (M = 28.7, SD = 8.82) and non-teachers (M = 27.9, SD = 5.23) indicated a non-significant result $F (1,123) = .315, p > .05$; partial $\eta^2 = .003$ (Table 7). Profile plots were then created for overall job satisfaction (Figure 1), intrinsic job satisfaction (Figure 2), and extrinsic job satisfaction (Figure 3).

Table 1
Demographics

<table>
<thead>
<tr>
<th></th>
<th>Age</th>
<th>Gender</th>
<th>Job Position</th>
<th>Education</th>
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<td>125</td>
<td>125</td>
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<td>Median</td>
<td>36.00</td>
<td>2.0000</td>
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<tr>
<td>Mode</td>
<td>34.00</td>
<td>2.00</td>
<td>1.00</td>
<td>3.00</td>
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<tr>
<td>Std. Deviation</td>
<td>9.42</td>
<td>.50</td>
<td>.47</td>
<td>.76</td>
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<tr>
<td>Variance</td>
<td>88.73</td>
<td>.252</td>
<td>.23</td>
<td>.59</td>
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<td>Range</td>
<td>44.00</td>
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Table 2
Gender Distribution

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</thead>
<tbody>
<tr>
<td>Male</td>
<td>60</td>
<td>48.0</td>
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<tr>
<td>Female</td>
<td>65</td>
<td>52.0</td>
<td>52.0</td>
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<td>Total</td>
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Table 3
Education Distribution

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<th>Valid Percent</th>
<th>Cumulative Percent</th>
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</thead>
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<td>High School</td>
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<td>16.8</td>
<td>16.8</td>
<td>16.8</td>
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<tr>
<td>College Level</td>
<td>13</td>
<td>10.4</td>
<td>10.4</td>
<td>27.2</td>
</tr>
<tr>
<td>Masters or Greater</td>
<td>91</td>
<td>72.8</td>
<td>72.8</td>
<td>100.0</td>
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<tr>
<td>Total</td>
<td>125</td>
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<td>100.0</td>
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### Table 4
Dependant Variable Correlations

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</thead>
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<tr>
<td>1.) Overall Satisfaction</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.) Intrinsic Satisfaction</td>
<td>.811*</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>3.) Extrinsic Satisfaction</td>
<td>.850*</td>
<td>.381*</td>
<td>1</td>
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</table>

*. Correlation is significant at the 0.01 level (2-tailed).

### Table 5
Job Satisfaction Descriptive Statistics

<table>
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<th>Job Position</th>
<th>Mean</th>
<th>Std. Deviation</th>
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<tr>
<td>Overall Satisfaction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher</td>
<td>73.93</td>
<td>12.64</td>
<td>83</td>
</tr>
<tr>
<td>Non-teacher</td>
<td>69.30</td>
<td>11.13</td>
<td>42</td>
</tr>
<tr>
<td>Total</td>
<td>72.38</td>
<td>12.30</td>
<td>125</td>
</tr>
<tr>
<td>Teacher</td>
<td>45.18</td>
<td>6.65</td>
<td>83</td>
</tr>
<tr>
<td>Non-teacher</td>
<td>41.38</td>
<td>7.09</td>
<td>42</td>
</tr>
<tr>
<td>Total</td>
<td>43.90</td>
<td>7.01</td>
<td>125</td>
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<tr>
<td>Intrinsic Satisfaction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher</td>
<td>28.75</td>
<td>8.82</td>
<td>83</td>
</tr>
<tr>
<td>Non-teacher</td>
<td>27.92</td>
<td>5.23</td>
<td>42</td>
</tr>
<tr>
<td>Total</td>
<td>28.48</td>
<td>7.79</td>
<td>125</td>
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</table>

### Table 6
MANOVA Results: Teaching vs Non-teaching Staff

<table>
<thead>
<tr>
<th>Effect – Job Position</th>
<th>Value</th>
<th>F</th>
<th>df</th>
<th>Error df</th>
<th>Sig.</th>
<th>Partial Eta Squared</th>
<th>Noncent. Parameter</th>
<th>Observed Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pillai's Trace</td>
<td>.069</td>
<td>4.495*</td>
<td>2.00</td>
<td>122.00</td>
<td>.013</td>
<td>.069</td>
<td>8.99</td>
<td>.759</td>
</tr>
<tr>
<td>Wilks' Lambda</td>
<td>.931</td>
<td>4.495*</td>
<td>2.00</td>
<td>122.00</td>
<td>.013</td>
<td>.069</td>
<td>8.99</td>
<td>.759</td>
</tr>
<tr>
<td>Hotelling's Trace</td>
<td>.074</td>
<td>4.495*</td>
<td>2.00</td>
<td>122.00</td>
<td>.013</td>
<td>.069</td>
<td>8.99</td>
<td>.759</td>
</tr>
<tr>
<td>Roy's Largest Root</td>
<td>.074</td>
<td>4.495*</td>
<td>2.00</td>
<td>122.00</td>
<td>.013</td>
<td>.069</td>
<td>8.99</td>
<td>.759</td>
</tr>
</tbody>
</table>

*. Exact Statistic
Table 7
ANOVA: Tests of Between-Subjects Effects

<table>
<thead>
<tr>
<th>Source</th>
<th>Dependent Variable</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
<th>Partial Eta Squared</th>
<th>Noncent. Parameter</th>
<th>Observed Power d</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Satisfaction</td>
<td></td>
<td>597.89</td>
<td>1</td>
<td>597.89</td>
<td>4.043</td>
<td>.047</td>
<td>.032</td>
<td>4.043</td>
<td>.514</td>
</tr>
<tr>
<td>Job Position Satisfaction</td>
<td>Intrinsic Satisfaction</td>
<td>402.65</td>
<td>1</td>
<td>402.65</td>
<td>8.695</td>
<td>.004</td>
<td>.066</td>
<td>8.695</td>
<td>.833</td>
</tr>
<tr>
<td></td>
<td>Extrinsic Satisfaction</td>
<td>19.23</td>
<td>1</td>
<td>19.23</td>
<td>.315</td>
<td>.576</td>
<td>.003</td>
<td>.315</td>
<td>.086</td>
</tr>
</tbody>
</table>

d. Computed using alpha = .05

![Estimated Marginal Means of Overall Satisfaction](image)

*Figure 1 - Overall Job Satisfaction*
Figure 2 - Intrinsic Job Satisfaction

Figure 3 - Extrinsic Job Satisfaction
3. What dimensions do teaching staff and non-teaching staff find important in
determination of job satisfaction?

Results for dimensional job satisfaction rankings are indicated for teaching and
non-teaching staff in Table 8. Teachers outscored non-teaching staff in all dimensional
categories except Supervision (Both Human Relations and Technical) and Company
Policies and Practices. Results further indicated that teaching staff scored the highest on
dimensions of Compensation, Working Conditions, and Social Service respectively
(Table 9). The lowest three ranking dimensions, from lowest to highest, were reported as
Supervision-Human Resources, Company Practices and Policies, and Supervision-
Technical. The top three dimension rankings for non-teaching staff were reported to be
Achievement, Creativity, and Social Service. Lowest three dimensions were, from low to
high, for non-teaching staff was determined to be Activity, Independence, and Variety
respectively.
<table>
<thead>
<tr>
<th>Question</th>
<th>Teaching Staff</th>
<th>Non-teaching staff</th>
</tr>
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Conclusions

The results of this study indicated that job satisfaction levels between high school teaching and non-teaching staff are significantly different. Results further indicated that teachers and non-teacher value the dimensions of job satisfaction differently between each group. The following are the conclusions of the study and the results obtained by the data analysis. Conclusions are limited to the constraints of the data, and the methodology, used in this study.

1. How does overall positive or negative non-teaching staff job satisfaction compare to overall teacher job satisfaction? and 2.) How does extrinsic or intrinsic non-teaching staff job satisfaction compare to extrinsic and intrinsic teacher job satisfaction?

Results of this study indicated that high school teachers scored significantly higher on job satisfaction ratings than non-teaching staff. When further analysis of statistical significance were preformed via between subjects ANOVA methods (Table 7), results indicated that teachers scored significantly higher on the intrinsic scale of job satisfaction, but not significantly more on the extrinsic scale. Due to the significantly higher intrinsic scale, it is reasonable to conclude that the teachers overall job satisfaction was influenced by this significantly higher intrinsic score.

One possible reason for the teacher group to score higher on the intrinsic scale is that the job of teachers is more intrinsically rewarding. Rhodes, Nevill, and Allan (2004) concluded that high school teachers’ satisfaction effectors included higher pay, felt value, and an intrinsic desire to help children. Rhodes et. al. further concluded that teachers were more satisfied with their jobs, and less likely to leave, if these intrinsic desires and fulfillment were present. Persevica (2011) further supported Rhodes et. al. (2004) by
determining that higher student achievement, which factors into the intrinsic job satisfaction of a teacher, is correlated with higher intrinsic job satisfaction, and lowered attrition rate. Thus, a teacher’s job satisfaction is related, and possibly affected, by the conditions within the classroom.

In this study on teacher job satisfaction, confounding variables may exist because the statistically significant difference in intrinsic job satisfaction. True causation of increased intrinsic job satisfaction cannot be determined; however, it is meaningful to note that high school teachers appear to have a significantly higher intrinsic job satisfaction influenced by some factor that differs from the job experiences of non-teachers. Since the lack of statistical difference was found between the two groups for extrinsic job satisfaction, it is logical to conclude that the extrinsic conditions of the sampled workplace affects all staff member similarly. While Mackenzie (2007) concluded that working conditions could affect teacher satisfaction, it appears that working conditions may have a relatively similar effect on both teaching and non-teaching staff.

3. What dimensions do teaching staff and non-teaching staff find important in determination of job satisfaction?

Results from aggregated mean dimension scores for teaching and non-teaching indicate that teachers scored higher in all categories except Supervision (Both Human Relations and Technical), and Company Policies and Practices. However, even with a majority of higher scores, extrinsic scores for teacher were not significantly higher. Since teachers scored higher in all categories other than the aforementioned dimensions, this may signify that teaching staff are relatively sensitive to supervision and policy issues.
While further analysis would have to be performed to determine what the true cause of lower scores in supervision and policy dimensions, the difference is meaningful to note.

Ranking of high school teacher job satisfaction dimensions resulted in the highest satisfaction score in Compensation, Working Conditions, and Social Service. These results indicate that teachers are relatively happy with their salaries, the physical conditions of the workplace, and the service they give back to the community. While the results indicate that teachers are happy with these dimensions, it may not indicate teacher’s concern with a particular dimension. In fact, the lowest three rankings for teaching staff, such as Supervision (Technical and Human-Resources) and Company policies and practices, may indicate that teacher have more passion for these categories, and thus are less satisfied due to higher expectations and low return. While further analysis may need to be examined to determine the logic behind this phenomenon, it is interesting to note that the lowest three ranked dimensions for teaching staff were also the only dimensions that underscored the same non-teaching dimensions.

Non-teaching staff indicated that the highest three ranking job satisfaction dimensions were Achievement, Creativity, and Social Service. The ranking of these dimensions indicate that non-teaching staff are most satisfied with their workplace achievements, their ability to be creative, and the service they give to their community. In fact, both teacher and non-teaching staff ranked third in Social Service. Given that both employed groups are working in a service-oriented environment of a high school, it could be possible that the environment influenced the Social Service dimension similarly for both groups. While interesting to note, follow-up analyses are necessary to determine the causation of this apparent equality between these groups.
The lowest three ranked job satisfaction dimensions according to non-teaching staff appear to be Variety, Independence, and Activity. Hence, non-teaching staff are least happy with the variety of work they perform, the independence to do such work, and the ability to stay busy. While the ranking suggest the non-teaching staff are dissatisfied with these dimensions, just as with teaching staff, the reasoning behind the results may indicate a higher expectation for these respective dimensions. Thus, if an employee is dissatisfied with a particular dimension, this may indicate a higher level of importance placed on that particular dimension.

Implications and Recommendations

This study on the Job Satisfaction of Teaching and Non-teaching Staff offers data in regards to the high school employment environment. The purpose of obtaining this data is to add to the body of knowledge regarding teacher job satisfaction, school-staff job satisfaction, and offer insight for teacher attrition causation. While the population and sample limit the data presented in this study, future studies can use the evidence presented to compare and contrast to other settings. The following are the implications of this study, as well as recommendations for future research based on the findings and methodology presented in this study.

The key implication of this study is the presence of a more significant level of job satisfaction among teachers in a working environment. Typically, teachers are examined independently from other staff members within a population (Strunk & Robinson, 2006). While the methodology focusing on solely teaching staff is needed in particular situations, the ability to use general satisfaction instrumentation, such as the MSQ, allows
the researcher to compare job satisfaction differences within a school population. The results of this study indicated that teachers were more satisfied, on both overall and intrinsic scales, than non-teaching staff. This may imply that teachers may be happier due to some factor not being examined with contemporary instrumentation. This implies that a variety of instrumentation must be used to examine what causes teacher to become dissatisfied with their professional experiences.

Aside from the significant differences between teaching and non-teaching staff, the lack of significant extrinsic differences between the two representative groups implies that the external environment affects teachers in a similar manner as non-teaching employees. If this result can be duplicated, this implies that administration can positively or negatively affect teachers’ job satisfaction, and possibly their exodus from employment, by controllable factors outside of the classroom. Given the findings of this study, it would signify that policies of administration might need to change to better, or maintain, the external environment as a mean to improve the retention of teaching professionals.

The final implication of this study related to the hierarchy of job satisfaction dimensions as reported by teachers, specifically compensation. Teaching staff ranked compensation, or the pay one receives, as the most satisfying dimension. This supported Mackenzie’s (2007) and Weiqi’s (2007) findings in which teacher primary morale effector was pay. If similar results are found in future studies, this would indicate that teacher compensation might be critical to retention of teachers. While other dimensions may effect a teacher’s decision to remain in the workplace, compensation is a controllable dimension that can be changed via policy and practices.
This study on Job Satisfaction of Teaching and Non-teaching Staff yielded results that suggest the differences between job positions in the educational workplace. While these results are meaningful to add to the body of knowledge of teacher job satisfaction, there are some improvements that can be made in future reproductions of this study. The first recommendation would be to seek a larger sample size. When seeking approval from various school districts for this study, rejection was met. In turn, a limited sample size was studied, and only a limited generalization of results could be made. Future reproductions of this study should include multiple schools, and possibly multiple school districts. It is logical to conclude that the results of this study are possibly due to the population in which the participants were employed. While the results suggest specific patterns within this studies sample, a broader sample will be needed to make overarching generalization.

A further recommendation for this study would be to examine the longitudinal levels of job satisfactions between the two groups of employees. The sample population, when examined, was not in contract negotiation, board elections, nor administrational change at the time of the data collection. Since Balkar (2009) concluded that administrational action and behavior could affect the job satisfaction of teachers within a school, it would be appealing to compare longitudinal data to determine if the results are stable. Given the purpose of this study is to add to the body of knowledge to help reduce teacher attrition, a longitudinal study would determine the effect extrinsic factors has on a teacher population over time, and thus add to the knowledge base as to the dynamics of teacher job satisfaction.
The final recommendation offered in this study is to incorporate alternative forms of assessment within the study. While the MSQ-SF is a reliable job satisfaction instrument, it cannot analysis teacher specific job requirements. Given that the findings of this study indicate that teachers are significantly more intrinsically satisfied with their employment, it would be noteworthy to examine the cause of this phenomenon. By using instrumentation such as the Schools and Staffing Survey (SASS) and the Teacher Satisfaction Survey (TSS) in Strunk and Robinson (2006), data from the MSQ-SF can be compared to determine the cause of job satisfaction patterns between teaching and non-teaching staff. While this would require the employment of a specific methodology, the outcomes of any ensuing study may result in more definitive conclusions than could be offered in this study.

The products of this study indicate that there is a significant difference between teaching staff and non-teaching staff in an educational environment. While the causation of these differences cannot be determined without further study, the findings add to the body of knowledge. With further study, and deeper examination of teacher job satisfaction, the cause of teacher attrition may be better understood, thus creating a more stable and cost effective system of education.
REFERENCES


doi:10.1177/0013124510362340


doi:10.1080/09243453.2011.587437


Young, D. J. (1999). Teacher morale in Western Australia: A multilevel model. *Learning Environments Research, 3*, 159-177.