Job Satisfaction Among Elementary Level Educators

Andrea Greene
Dan Jensen
Tim Madden
Richard Maloon

MBA 600
Organizational Behavior
Dr. Eric Stark
Table of Contents

Abstract -3-
Introduction -4-
Theory & Background -4-
Methods & Measurements -8-
Results -9-
Discussion -10-
Limitations -11-
Conclusion -12-
References -13-

Appendices
(A) Survey Instrument -14-
(B) Herzberg Factor Means by School Type -19-
(C) Public and Private School Teachers’ Means by Tenure -20-
(D) Descriptive Statistics -21-
(E) Descriptive Statistics of Hygiene and Motivation Factors -22-
(F) Hygiene Effects on Job Satisfaction -23-
(G) Motivation Effects on Job Satisfaction -24-
(H) Hygiene and Motivation Effects on Job Satisfaction -25-
(I) Relationships between Tenure and Job Satisfaction -26-
(J) Public School Teacher Means Segregated by Tenure -27-
(K) Private School Teacher Means Segregated by Tenure -28-
Abstract

The objective of this study was to determine the influence that various hygiene and motivating factors had on a sample of elementary school teachers to determine which factors most motivate employees. A paper survey was distributed to 117 respondents who are all actively involved in elementary teaching. Results indicate a negative relationship between tenure and overall job satisfaction among elementary school teachers. This finding is contradictory to other research that shows a positive relationship between tenure and job satisfaction. The conclusion of this study indicates “burnout” is a very real phenomenon among elementary educators and should be examined more closely by school administrators.
Introduction

Teachers are not only tasked with imparting knowledge, they often have the power to inspire or suppress intellectual curiosity. Elementary teachers in particular help to lay the foundation upon which students’ attitudes towards education are built. Despite this profound influence on individuals and society as a whole, compensation for teachers, both tangible and intangible, has become cliché. According to a recent survey on payscale.com, elementary school teachers’ national median income for 2006 was $38,500, more than 4% lower than retail store managers’ median of $40,200. What does this startling fact reflect about the value we place on those individuals who educate our children?

So what is it, if not monetary rewards or reverence, that draws so many individuals into this noble profession? What motivates teachers to remain in the education field when they could earn more in another discipline? Is there a common driver of job satisfaction among teachers and if so, what is it? The following analysis attempts to identify and compare the sources of job satisfaction for teachers of public and private elementary schools. It is important to understand the factors that motivate today’s teachers if schools want to attract and retain those individuals who strive to teach not only information, but also the value of knowledge.

Theory & Background

This study applies Frederick Herzberg’s Two-Factor Theory of Motivation to determine levels of job satisfaction among public and private school teachers. Herzberg’s two-factor
paradigm first appeared in his book *The Motivation to Work* (1959). Herzberg theorized that two elements are responsible for individuals’ level of job satisfaction or dissatisfaction: hygiene factors and motivators *(Figure A)*. According to Herzberg, hygiene factors are those factors which are not responsible for motivating employees but result in job dissatisfaction if they are not present at sufficient levels. In contrast, motivators are those factors which affect job satisfaction and levels of motivation by enriching the job experience *(Figure B)*.

Resarching the application of Herzberg’s theory on the satisfaction levels of elementary educators revealed some interesting findings. In a study conducted on school conditions in Chicago and Washington, DC, Herzberg’s hygiene factor theory was maintained (Schneider, 2003). It was found that many teachers working within inner-city public schools reported lost working days or adverse health effects due to inadequate working conditions. Problems such as overcrowding, air quality, noisy hallways, dirty restrooms and cafeterias, and insufficient science, art, music, and physical education facilities were cited as attributing to job dissatisfaction. In fact, dissatisfaction was so prevalent, of those who rated their school with a “C” or below, close to 30% reported intentions to leave the teaching profession altogether.
Another study reviewed the relationship between teachers’ job satisfaction and principals’ behaviors and attitudes (Richards, 2003). In this study, teachers were asked what factors were most important as determiners of job satisfaction. The research found that principal support with student discipline and parental matters were the most important factors to teachers, and lack of such support resulted in dissatisfaction (Figure 1). It was further discovered, however, that high levels of support resulted in increased satisfaction and teacher motivation. In fact, positive principal-teacher relationships were indicative of higher degrees of school and student commitment. In these ways, quality of supervision was perceived as a motivator rather than a hygiene factor.

Likewise, research conducted in the 1980’s specifically sought to establish whether Herzberg’s two-factor theory could be applied to elementary and secondary level educators at all. Researchers within the Tennessee Career Ladder Program (TCLP) wanted to empirically determine whether teachers respond the same to motivators and hygiene factors as employees in
profit-making businesses (Gawel, 1997). The results of the study showed that teachers viewed salary as a “strong motivational factor,” contradictory to Herzberg’s theory that hygiene factors do not motivate. The teachers surveyed perceived salary as a measure of achievement and therefore viewed monetary compensation more in-line with the motivational factors described in Herzberg’s theory.

Though many studies, like the ones above, have measured job satisfaction among elementary level educators, there was no research found segregating the two school types and thereby comparing them. The primary hypothesis of this study is that teachers who work in elementary education perceive job satisfaction factors differently. We believe that public school teachers will be more satisfied with the hygiene factors at their jobs, while private school teachers will be more satisfied with the motivation factors. The independent variables in our
study are various motivation and hygiene factors proposed by Herzberg. The dependent variable is the level of job satisfaction itself.

Methods & Measurements

The data gathering instrument used for this study was a survey adapted from a job satisfaction questionnaire originally developed for the health care profession. Questions were extracted based on their relevant application of Herzberg’s Two-Factor Theory of Motivation and, where necessary, were slightly altered to apply to an education-based respondent pool. The final survey consisted of three demographic questions, twenty-eight factor questions, and one free-text response box. (Appendix A) The twenty-eight factor questions were designed to align with the dependent variable, job satisfaction, and each of eight independent variables based on Herzberg’s theory, with three questions for each variable. The eight Herzberg factors were categorized into four Hygiene factors and four Motivation factors. The Hygiene factors measured were Quality of Supervision, Rate of Pay, Company Policies, and Working Conditions. The Motivational Factors measured were Career Advancement, Personal Growth, Recognition, and Responsibility. All responses were measured using a five-point Likert scale anchored on Strongly Disagree (1 point) to Strongly Agree (5 points).

All teachers within an evaluated school were asked to participate in the survey. A hard copy questionnaire was provided to each school’s administrator who then distributed it to the teaching staff. Participation in the survey was voluntary and anonymous. The survey was distributed to two public schools with a total respondent pool of 105 individuals and twenty-one private schools with a total respondent pool of 77 individuals. Of the 182 possible respondents, 116 completed the survey for a response rate of 63.7%.
Results

This study’s hypothesis that public school teachers are more satisfied with hygiene factors and private school teachers are more satisfied with motivation factors was refuted. Appendix B, Hygiene Factor Means by School Type, demonstrates that the hygiene factor mean for public school teachers was 3.89, while the mean for private school teachers was 3.93. Of the four hygiene factors, only Rate of Pay showed a significant difference; private educators had a mean of 3.74 compared to 3.55 for teachers in the public domain.

Conversely, the motivation factor means for public and private school teachers were 3.99 and 3.91, respectively. The major difference among the motivation factors was that public educators felt a higher satisfaction in career advancement, with a mean of 3.68, than did private school educators with a mean of 3.52.

The study’s most compelling point, however, was the great similarity in means between public and private school teachers in all eight factors and job satisfaction, with overall job satisfaction at a mean of 4.23 for public school teachers and 4.08 for private school teachers. The descriptive analysis of job satisfaction and all but one of the eight factors reveals that they each have variances within means under .40.

Regression analysis of the data in Appendices F,G,H, and I supported prior understanding that hygiene and motivational factors are valid factors in job satisfaction. First, the effect of hygiene factors accounted for 47.17 % of the variance in job satisfaction scores; these were statistically significant at the alpha level of 0.05. Also, the effects of motivators accounted for 48.57% of the variance in job satisfaction scores and were statistically significant at the alpha level of 0.05. When job satisfaction was tested for multiple regression (with both hygiene and
motivation as independent variables), the two variables accounted for 51.97% of the variance and were statistically significant and the 0.05 alpha level as well. Thus, all eight factors surveyed were significant in their influence on job satisfaction.

Discussion

Review of the descriptive statistics in appendices D and E show that for most of the measured factors, teachers’ responses were tightly clustered together with variances below .40. Rate of pay, however, showed a much larger variance of .71. The comparison between public and private does not account for this degree of variance, but the tenure of both public and private educators did show a greater spread in responses. As noted in the graph, Public & Private School Mean by Tenure (Appendix C), satisfaction with salary dropped the greater the teacher’s tenure, with the exception of those teaching three to four years. Likewise, job satisfaction overall dropped as tenure increased, with the exception of those who had been at their respective school for 20 to 32 years. This exception may be a result of the small number of teachers within this tenure group. It may be presumed that only the most satisfied teachers remained in the field for this duration. Although a regression analysis of tenure to job satisfaction was not statistically significant, when reviewing the grouping by tenure data, there are patterns that warrant further study and have potential significant impact in administration policies and procedures.

Appendices J and K show the surprising negative relationship finding between job satisfaction and tenure among elementary school teachers. Other studies using Herzberg’s work such as those done by Near et. al. show a positive relationship between tenure and job satisfaction. This paradoxical finding may indicate that school administrators need to be more aware of teaching staff that has been in the education field for many years. The most common
anecdotal evidence attributes this negative relationship to a condition of “burnout.” Additionally, increased emphasis on standards of learning scores and less on the development of students appears to be the most cited grievance.

**Limitations**

There were several limitations of the study. Surveyed schools were chosen based on no random sampling but rather due to a research group member’s affiliation with the school system. The two public schools were chosen from the rural communities of Timberville, Virginia and Quicksburg, Virginia while the private schools were all from the Seventh-day Adventist church school system within the Potomac Conference whose district spans all of Virginia and the Washington D.C. metro area. Further research would be necessary to determine whether these findings could be generalized to other elementary teachers.

Another limitation was the subjectivity of respondents. The use of a Likert scale encourages a central tendency bias where all but the most outspoken survey participants cluster their responses near the middle of the scale to avoid extreme positive and negative responses. Because the survey measures categorical data instead of numerical data, the responses could be skewed by each individual’s interpretation of the degree of each response’s meaning.

Finally, teachers who took the hard copy survey within a group setting may have skewed their results to be more positive if they felt that their responses could have been read by nearby participants. To counter this, future surveys should be conducted anonymously via an online survey tool such as ©Websurveyor whereby each respondent can take the survey independently and with the assurance of anonymity.
Conclusion

Although the hypothesis was disproved and the results of this study show that job satisfaction issues cross over the public-private school divide, there are items that warrant further research. The finding of salary as a motivator within the education field deserves particular attention. Why do teachers perceive compensation as a measure of achievement while this has not shown to be so in other professions? Likewise, the relationship between tenure and salary as measures of dissatisfaction should also be further investigated. Is the driver of this relationship truly based on dollars or is it a symptom of other issues over time? Based on the findings here, ignoring these influencers will continue to affect the satisfaction of educators and ultimately their contributions to our children.
References


"Two Factor Theory – Herzberg, Frederick." valuebasedmanagement.net. 27 September 2006 <http://www.valuebasedmanagement.net/methods_herzberg_two_factor_theory.html>
Employee Satisfaction in Private and Public Schools

Purpose: This survey asks you about your relationships with co-workers, managers, and your job in general. Your answers will be combined with the answers of your co-workers to help your organization better understand employee attitudes and opinions.

PLEDGE OF CONFIDENTIALITY

We assure your confidentiality. Your individual survey results will only be seen by the members of the MBA Organizational Behavior research group from JMU. The comments you make at the end of this survey will be typed, combined with all other comments in a random order, and then shared with administration. In order to ensure accurate and truthful results, please be as honest as you can.

1) Do you work for a:
   - Private School
   - Public School

2) Gender
   - Male
   - Female

3) For how many years have you been employed at this school?

   [ ] Years
4) The amount of job stress that I feel is reasonable.
   - Strongly Agree  Agree  Neutral  Disagree  Strongly Disagree

5) The person I report to praises people when they do a good job.
   - Strongly Agree  Agree  Neutral  Disagree  Strongly Disagree

6) My job allows me to learn new things.
   - Strongly Agree  Agree  Neutral  Disagree  Strongly Disagree

7) I respect the knowledge, skills, and abilities of the person to whom I report.
   - Strongly Agree  Agree  Neutral  Disagree  Strongly Disagree

8) I have the authority at my job to independently do what needs to get done.
   - Strongly Agree  Agree  Neutral  Disagree  Strongly Disagree

9) I consider myself a satisfied employee.
   - Strongly Agree  Agree  Neutral  Disagree  Strongly Disagree

10) My school provides tools and resources to support my career development.
    - Strongly Agree  Agree  Neutral  Disagree  Strongly Disagree
11) Taken together, my compensation, benefits, and work environment are comparable to similar jobs in other educational organizations in this area.

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree

12) My school supports me in developing new skills.

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree

13) I am satisfied with our performance review system.

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree

14) The person I report to is open to new ways of doing things

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree

15) My school encourages creativity and innovation.

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree

16) My administration holds individuals accountable for being productive.

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree

17) Qualified employees get promoted at my school.

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree

18) Overall, I enjoy my job.

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree
19) I have a reasonable level of job security at my school.

○ Strongly Agree ○ Agree ○ Neutral ○ Disagree ○ Strongly Disagree

20) I am satisfied with the benefits available to me.

○ Strongly Agree ○ Agree ○ Neutral ○ Disagree ○ Strongly Disagree

21) I am satisfied with the education and training I am provided for my present job.

○ Strongly Agree ○ Agree ○ Neutral ○ Disagree ○ Strongly Disagree

22) I am satisfied with the recognition I receive for doing a good job.

○ Strongly Agree ○ Agree ○ Neutral ○ Disagree ○ Strongly Disagree

23) The person I report to has realistic expectations about what I can achieve.

○ Strongly Agree ○ Agree ○ Neutral ○ Disagree ○ Strongly Disagree

24) My school conducts business in an ethical manner.

○ Strongly Agree ○ Agree ○ Neutral ○ Disagree ○ Strongly Disagree

25) My school provides opportunities for career development.

○ Strongly Agree ○ Agree ○ Neutral ○ Disagree ○ Strongly Disagree

26) Qualified employees get promoted at my school.

○ Strongly Agree ○ Agree ○ Neutral ○ Disagree ○ Strongly Disagree
27) My job makes good use of my skills and abilities.

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree

28) My administration is interested in the health and well-being of those who work here.

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree

29) I look forward to coming to work.

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree

30) Individual accomplishments are recognized at my school.

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree

31) Given my number of years at this school, workload, and education, I am fairly compensated.

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree

32) Please use this space for any additional comments you may have. Your responses are not personally-identifiable and the research team will combine them with all other responses before sharing any comments with members of administration.

Thank you for taking the time to complete this survey. Your opinions are very important to us!
<table>
<thead>
<tr>
<th>Years</th>
<th>Job Satisfaction</th>
<th>Hygiene</th>
<th>Motivation</th>
<th>Descriptive Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>4.166666667</td>
<td>3.767</td>
<td>4.76</td>
<td></td>
</tr>
<tr>
<td>Mode</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Median</td>
<td>3.9</td>
<td>3.9</td>
<td>4.1</td>
<td></td>
</tr>
<tr>
<td>Standard Error</td>
<td>0.204527707</td>
<td>0.204527707</td>
<td>0.204527707</td>
<td>0.204527707</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>0.90337437</td>
<td>0.90337437</td>
<td>0.90337437</td>
<td>0.90337437</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>0.8486656925</td>
<td>0.8486656925</td>
<td>0.8486656925</td>
<td>0.8486656925</td>
</tr>
<tr>
<td>Skewness</td>
<td>0.0790486667</td>
<td>0.0790486667</td>
<td>0.0790486667</td>
<td>0.0790486667</td>
</tr>
<tr>
<td>Range</td>
<td>2.31</td>
<td>2.31</td>
<td>2.31</td>
<td></td>
</tr>
<tr>
<td>Minimum</td>
<td>1.06</td>
<td>1.06</td>
<td>1.06</td>
<td></td>
</tr>
<tr>
<td>Maximum</td>
<td>4.397</td>
<td>4.397</td>
<td>4.397</td>
<td></td>
</tr>
<tr>
<td>Median</td>
<td>1.07</td>
<td>1.07</td>
<td>1.07</td>
<td></td>
</tr>
<tr>
<td>Mode</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Standard Error</td>
<td>0.156063016</td>
<td>0.156063016</td>
<td>0.156063016</td>
<td>0.156063016</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>0.7091345445</td>
<td>0.7091345445</td>
<td>0.7091345445</td>
<td>0.7091345445</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>0.6928806173</td>
<td>0.6928806173</td>
<td>0.6928806173</td>
<td>0.6928806173</td>
</tr>
<tr>
<td>Skewness</td>
<td>0.05532783</td>
<td>0.05532783</td>
<td>0.05532783</td>
<td>0.05532783</td>
</tr>
<tr>
<td>Range</td>
<td>1.92</td>
<td>1.92</td>
<td>1.92</td>
<td></td>
</tr>
<tr>
<td>Minimum</td>
<td>1.03</td>
<td>1.03</td>
<td>1.03</td>
<td></td>
</tr>
<tr>
<td>Maximum</td>
<td>2.84</td>
<td>2.84</td>
<td>2.84</td>
<td></td>
</tr>
<tr>
<td>Median</td>
<td>1.75</td>
<td>1.75</td>
<td>1.75</td>
<td></td>
</tr>
<tr>
<td>Mode</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Standard Error</td>
<td>0.1170886667</td>
<td>0.1170886667</td>
<td>0.1170886667</td>
<td>0.1170886667</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>0.6933202656</td>
<td>0.6933202656</td>
<td>0.6933202656</td>
<td>0.6933202656</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>0.5152570073</td>
<td>0.5152570073</td>
<td>0.5152570073</td>
<td>0.5152570073</td>
</tr>
<tr>
<td>Skewness</td>
<td>0.02360876</td>
<td>0.02360876</td>
<td>0.02360876</td>
<td>0.02360876</td>
</tr>
<tr>
<td>Range</td>
<td>1.55</td>
<td>1.55</td>
<td>1.55</td>
<td></td>
</tr>
<tr>
<td>Minimum</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Maximum</td>
<td>2.55</td>
<td>2.55</td>
<td>2.55</td>
<td></td>
</tr>
<tr>
<td>Median</td>
<td>1.40</td>
<td>1.40</td>
<td>1.40</td>
<td></td>
</tr>
<tr>
<td>Mode</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Standard Error</td>
<td>0.1050505051</td>
<td>0.1050505051</td>
<td>0.1050505051</td>
<td>0.1050505051</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>0.5999999999</td>
<td>0.5999999999</td>
<td>0.5999999999</td>
<td>0.5999999999</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>0.3989422805</td>
<td>0.3989422805</td>
<td>0.3989422805</td>
<td>0.3989422805</td>
</tr>
<tr>
<td>Skewness</td>
<td>0.0000000000</td>
<td>0.0000000000</td>
<td>0.0000000000</td>
<td>0.0000000000</td>
</tr>
<tr>
<td>Range</td>
<td>1.27</td>
<td>1.27</td>
<td>1.27</td>
<td></td>
</tr>
<tr>
<td>Minimum</td>
<td>0.95</td>
<td>0.95</td>
<td>0.95</td>
<td></td>
</tr>
<tr>
<td>Maximum</td>
<td>2.22</td>
<td>2.22</td>
<td>2.22</td>
<td></td>
</tr>
<tr>
<td>Median</td>
<td>1.18</td>
<td>1.18</td>
<td>1.18</td>
<td></td>
</tr>
<tr>
<td>Mode</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Standard Error</td>
<td>0.0984848485</td>
<td>0.0984848485</td>
<td>0.0984848485</td>
<td>0.0984848485</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>0.5833333333</td>
<td>0.5833333333</td>
<td>0.5833333333</td>
<td>0.5833333333</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>0.3508888889</td>
<td>0.3508888889</td>
<td>0.3508888889</td>
<td>0.3508888889</td>
</tr>
<tr>
<td>Skewness</td>
<td>0.0000000000</td>
<td>0.0000000000</td>
<td>0.0000000000</td>
<td>0.0000000000</td>
</tr>
<tr>
<td>Range</td>
<td>1.03</td>
<td>1.03</td>
<td>1.03</td>
<td></td>
</tr>
<tr>
<td>Minimum</td>
<td>0.92</td>
<td>0.92</td>
<td>0.92</td>
<td></td>
</tr>
<tr>
<td>Maximum</td>
<td>1.95</td>
<td>1.95</td>
<td>1.95</td>
<td></td>
</tr>
<tr>
<td>Median</td>
<td>1.40</td>
<td>1.40</td>
<td>1.40</td>
<td></td>
</tr>
<tr>
<td>Mode</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Standard Error</td>
<td>0.0984848485</td>
<td>0.0984848485</td>
<td>0.0984848485</td>
<td>0.0984848485</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>0.5833333333</td>
<td>0.5833333333</td>
<td>0.5833333333</td>
<td>0.5833333333</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>0.3508888889</td>
<td>0.3508888889</td>
<td>0.3508888889</td>
<td>0.3508888889</td>
</tr>
<tr>
<td>Skewness</td>
<td>0.0000000000</td>
<td>0.0000000000</td>
<td>0.0000000000</td>
<td>0.0000000000</td>
</tr>
</tbody>
</table>
## Appendix E

### Descriptive Statistics of Hygiene and Motivation Factors

<table>
<thead>
<tr>
<th>Factor</th>
<th>Count</th>
<th>Mean</th>
<th>Median</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hygiene Factors</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Working Conditions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Company Policy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quality of Supervision</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salary and Compensation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Motivation Factors</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leadership</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recognition</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal Growth</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Career Advancement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Company Policy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix F

Summary Output

Multiple R
R Square
Adjusted R Square
Standard Error
Observations

ANOVA

F Significance P

Hygiene Effects on Job Satisfaction

\[ Y = 0.8882x + 0.7776 \]

\[ R^2 = 0.4867 \]
### Appendix G

#### Motivation Effects on Job Satisfaction

<table>
<thead>
<tr>
<th>Regression Output</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Motivation</strong></td>
</tr>
<tr>
<td><strong>R Square</strong></td>
</tr>
<tr>
<td><strong>Adjusted R Squ</strong></td>
</tr>
<tr>
<td><strong>Observations</strong></td>
</tr>
</tbody>
</table>

#### ANOVA

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
<th>Significance F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>114</td>
<td>21.5397638</td>
<td>0.18774567</td>
<td>172.5795</td>
<td>17</td>
</tr>
<tr>
<td>Residual</td>
<td>113</td>
<td>0.241780023</td>
<td>0.00209184</td>
<td>0.211641</td>
<td>0.65</td>
</tr>
<tr>
<td>Regression</td>
<td>1</td>
<td>21.5397638</td>
<td>21.5397638</td>
<td>172.5795</td>
<td>17</td>
</tr>
</tbody>
</table>

#### Motivation and Job Satisfaction

- **Motivation**
  - **Intercept**
    - Coefficient: 0.38520474
    - Standard Error: 0.30850211
  - **X Variable 1**
    - Coefficient: 0.373666
    - Standard Error: 0.40533832

#### Job Satisfaction Means

- **Motivation Means**
  - 1.00
  - 1.50
  - 2.00
  - 2.50
  - 3.00
  - 3.50
  - 4.00
  - 4.50
  - 5.00

- **Motivation Means**
  - 0.00
  - 1.00
  - 2.00
  - 3.00
  - 4.00
  - 5.00

- **Motivation Means**
  - 0.00
  - 1.00
  - 2.00
  - 3.00
  - 4.00
  - 5.00

- **Motivation Means**
  - 0.00
  - 1.00
  - 2.00
  - 3.00
  - 4.00
  - 5.00
### Summary Output

**Hygiene and Motivational Effects on Job Satisfaction**

<table>
<thead>
<tr>
<th>Variable 2</th>
<th>Variable 1</th>
<th>Intercept</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.04152152</td>
<td>0.03333333</td>
<td>0.000366</td>
</tr>
<tr>
<td>0.03457125</td>
<td>0.02123456</td>
<td>0.0098765</td>
</tr>
<tr>
<td>0.01654321</td>
<td>0.05678901</td>
<td>0.0987654</td>
</tr>
</tbody>
</table>

**ANOVA**

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>0.5471234</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residual</td>
<td>0.4567890</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>0.5471234</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Observations**

- 116

### Coefficients

<table>
<thead>
<tr>
<th>Coefficient</th>
<th>Standard Error</th>
<th>t-statistic</th>
<th>p-value</th>
<th>Lower 95% CI</th>
<th>Upper 95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variable 1</td>
<td>0.04152152</td>
<td>0.000366</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Variable 2</td>
<td>0.03333333</td>
<td>0.000366</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intercept</td>
<td>0.000366</td>
<td>0.000366</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Appendix I

**Job Satisfaction Survey**

### ANOVA

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>21615</td>
<td>1</td>
<td>21615</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residual</td>
<td>2199206</td>
<td>71</td>
<td>30721</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>222097</td>
<td>72</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Regression Statistics**

- Observations: 132
- Standard Error: 0.06779724
- Adjusted R Square: 0.9936305
- R Square: 0.9948388
- Multiple R: 0.99773967

**Variable Coefficients**

<table>
<thead>
<tr>
<th>Coefficient</th>
<th>Standard Error</th>
<th>t-Stat</th>
<th>P-Value</th>
<th>Lower 95% CI</th>
<th>Upper 95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>0.0029359832</td>
<td>0.00159843</td>
<td>1.8295</td>
<td>-0.00633177</td>
<td>0.01220368</td>
</tr>
<tr>
<td>1</td>
<td>0.0009929072</td>
<td>0.00042364</td>
<td>2.3268</td>
<td>-0.00284085</td>
<td>0.00482668</td>
</tr>
<tr>
<td>2</td>
<td>0.0008382074</td>
<td>0.00031623</td>
<td>2.6542</td>
<td>-0.00399290</td>
<td>0.00566932</td>
</tr>
<tr>
<td>3</td>
<td>0.0006835072</td>
<td>0.00027297</td>
<td>2.5143</td>
<td>-0.00458825</td>
<td>0.00695529</td>
</tr>
<tr>
<td>4</td>
<td>0.0005288074</td>
<td>0.00022214</td>
<td>2.3865</td>
<td>-0.00510290</td>
<td>0.00626053</td>
</tr>
<tr>
<td>5</td>
<td>0.0003741072</td>
<td>0.00013823</td>
<td>2.6542</td>
<td>-0.00399290</td>
<td>0.00566932</td>
</tr>
<tr>
<td>6</td>
<td>0.0002194074</td>
<td>0.00010847</td>
<td>2.0031</td>
<td>-0.00254290</td>
<td>0.00297173</td>
</tr>
<tr>
<td>7</td>
<td>0.0000647072</td>
<td>0.00005587</td>
<td>1.1570</td>
<td>-0.00111085</td>
<td>0.00123425</td>
</tr>
</tbody>
</table>

---

*Note: The table continues with additional variables.*
Appendix J

Public School Teacher Means Segregated by Tenure

Job Satisfaction Survey