Absence from Work: A Study of Teacher Absenteeism in Selected Public Primary Schools in Uyo, Nigeria

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Abstract

Based on a field study of two hundred primary school teachers in the Nigerian City of Uyo in Akwa Ibom State, the relationships between absenteeism and job satisfaction, meaningfulness of work, and job stress respectively were explored. The research results showed that significant relationships exist between the dependent variable (absenteeism) and the respective independent variables (job satisfaction, meaningfulness of work and job stress). The study therefore concludes that job satisfactions, meaningfulness of work and job stress are major determinants of teacher absenteeism in Nigerian public primary schools. Some strategies to reduce teacher absenteeism were then suggested.

Keywords: Absenteeism, Job satisfaction, Job worth, Motivation, School, Stress, Teacher, Work

1. Introduction

Absenteeism is a major work place problem. Employees’ not showing up for work when scheduled is a serious human capital risk. This is because an employee can only contribute meaningful to the achievement of organizational objectives when he/she makes himself/herself available for work. Therefore, absenteeism negates the goal of productivity improvement as it translates to lost productivity.

Like in many other developing countries, teacher absenteeism is a growing dilemma in Nigerian Education particularly in government or public schools. Studies of government teacher absence in six countries (Bangladesh, Ecuador, India, Indonesia, Peru and Uganda) found teacher absence rates to be between 11% and 27% (Chaudhury et al, 2005). Another report found that 20% of teachers in rural western Keyan primary schools could not be found during school hours, while in Uganda, two surveys found teacher absentee rates of 27% in 2002 and 20% in 2007. In Nigeria, it is currently estimated that about 20% of the teaching workforce in government primary schools are absent on a given work day (World Bank, 2010; Champion, 2010).

Teacher absenteeism is prevalent in public primary schools in Uyo. It was recently reported that a top official of the Akwa Ibom State Universal Basic Education Board (AKSUBEB) went around public primary schools in Uyo capital city; and found many teachers (and in some cases even head teachers and their deputies) absent from work without permission (AKBC Radio News cast, 2010).

It is apparent that teacher absenteeism when excessive will impact negatively on student academic achievement as student learning is disrupted when a teacher is repeatedly absent from the classroom. Studies (Woods and Montagno, 1987; Banerjee and Duflo, 2006; Miller, et al, 2007; Whelan, 2008; and Clotfelter, et al, 2009) have indicated that teacher’s absence negatively affect student’s academic performance. Common sense tells us that successful learning outcomes can only occur when pupils are taught by teachers who applies effort- is present in the classroom and spends time actually teaching so as to maximize instruction.

An absentee is a person who is expected to be in a particular place at a particular time but who is not there. Cascio (2003), see employee absenteeism as “any failure of an employee to report for or to remain at work as scheduled, regardless of the reason”. Absenteeism, according to Sayles and Strauss (2001), reflects legitimately excused time off work as well as disinterest and low morale.

An employees’ ability to attend work is influenced by factors such as family commitments, transport problems, ill-health, injuries, accidents, disinterest and the like. Though many work related as well as non-work related variables enter into the decision to stay away from work, only three propositions are put forward for empirical determination within the context of this work.

The first proposition is that absenteeism is dependent on job satisfaction. Robbins (2005) defines job satisfaction as a general positive attitude towards one’s job. It has also been described as an affective reaction to one’s job.
(Weiss, 2002). Job satisfaction could simply be taken to mean an employee’s contentment with his/her job. Though the contention is that a satisfied worker is more productive than a dissatisfied one, but empirical evidence has only demonstrated a weak negative relationship between job satisfaction and absenteeism (Hackett, 1989). As such, there is no consistent correlation between productivity and job satisfaction. Research show, however, that job satisfaction correlates negatively with increased absenteeism rate, labour turnover and poor morale (Luthans, 2001).

The second proposition is that the perception of meaningfulness of work is a determinant of absenteeism. Meaningfulness of work here refers to the degree one’s job conveys a sense of value and worthiness. The degree to which people feel their jobs are important tends to affect the rate of absenteeism. For example, an investigation of selected government employees in the United States (US) found that those who believed their work was important had lower absenteeism than did those who did not feel this way (Clegg, 1983).

The third and last proposition is that there is a link between absenteeism and stress. Stress may be defined, according to Odgers and Keeling (2000), as any external stimulus that produces wear and tear on person’s psychological or physical well being. In a study undertaken by Ulleberg and Runndmo (1997), job stress was found to be associated with job dissatisfaction, absenteeism, as well as experience of strain. Odgers and Keeling (2000) further affirmed that work is the leading cause of stress, and that job related stress can result in employee illness, turnover, job dissatisfaction, reduced productivity, and other work place problems. Charmaine Griffiths, spokesperson for the British Health Foundation, was reported to have declared that “a degree of challenge is necessary for us to feel motivated and enthusiastic, but too much stress can cause ill health” (Guardian Thursday, September 29, 2005).

2. Methodology

The study is a survey. The research covered all the 47 public primary schools in Uyo, the capital city of Akwa Ibom State (one of Nigeria’s 36 states). The work is mainly concerned with teacher absenteeism in primary schools- primary education in Nigeria refers to the foundation level of the educational system which runs for six years. All the 1 067 teachers, comprising 153 (14.34%) males and 914 (85.66%) females, in the 47 public primary schools in Uyo constituted the population of study (see table 1). The cluster sampling technique was used to select the study sample. Each of the 47 public primary schools in Uyo metropolis were designated a cluster unit. Ten schools were randomly selected from the sampling frame- a list of the 47 schools. The schools so randomly selected are listed in Table 2 (see table 2 for details). All the 356 teachers comprising 39 (10.96%) males and 317 (89.04%) females in the 10 schools selected were automatically included in the sample. To facilitate primary data collection two research assistants were employed and trained in the modalities for the administration of the survey questionnaire constructed for the study. Within two weeks, the survey questionnaire were distributed and collected with a return rate of 56.18% representing 200 respondents comprising of 23 (11.50%) males and 177 (88.50%) females.

For the purpose of data analysis, data were presented in simple table constructs and the frequency counts/simple percentages methods used to analyze the data. To make the research findings more scientific, the chi-square test was used to test the validity of the propositions formulated to guide the study. The chi-square is applied basically to test whether or not, a relationship exists between the dependent and independent variables. Where a relationship is established, the Yule’s Q test was employed to test the strength and direction of such a relationship or association.

The survey questionnaire, among other things, inquired into the following issues:

a. To ascertain the extent of absenteeism, respondents were asked to report on their regularity or attendance at work within the last (most recent) six month period.

b. To determine the level of job satisfaction, the survey participants were asked to rate their satisfaction with their jobs.

c. To ascertain perception of meaningfulness of work, the respondents were asked to rate the meaningfulness of their work in terms of the sense of importance, value and worthiness it conveys.

d. To determine the level of job stress, the survey participants were asked to rate how stressful they consider their jobs to be.

3. Results

Table 3 showed that 26 respondents (13%) were very regular at work, 54 respondents (27%) were somewhat regular. Both response categories accounting for 40% of the sample were classified as having low level of
absenteeism. On the other hand, 112 respondents (56%) were not too regular at work while 8 respondents (4%) were not at all regular. Both response categories making up 60% of the sample were taken as indicating high level of absenteeism.

Table 4 revealed that 10 respondents (5%) were very satisfied with their jobs while 32 respondents (16%) were somewhat satisfied with their jobs. Both response categories representing 21% of the sample were taken as high job satisfaction. One hundred and ten respondents (55%) were not too satisfied with their jobs, whereas 48 respondents (24%) were not at all satisfied with their jobs. Both response categories accounting for 79% of the respondents were taken as indicating low job satisfaction.

Table 5 showed that 34 respondents (17%) indicated that their work was very meaningful while 25 respondents (12.50%) stated that their work was somewhat meaningful. These two response categories constituting 29.50% of the sample were classified as indicating high job value or worth. However, 95 respondents (47.50%) and 46 respondents (23%) respectively indicated that their work was ‘not too meaningful’ and ‘not at all meaningful’. Both response categories representing 70.50% of the sample were classified as depicting low job value or worth.

Table 6 revealed that 49 respondents (24.50%) perceived their jobs as very stressful, 100 respondents (50%) perceived it as somewhat stressful, and 31 respondents (15.50%) perceived their jobs as not too stressful, while 20 respondents (10%) perceived it as not at all stressful. The first two response categories accounting for 74.50% of the sample were classified as indicating high job stress while the last two response categories making up 25.50% of the respondents were taken as denoting low job stress.

Table 7 presents data for testing the first proposition which states that: absen
teeism is dependent on job satisfaction. This proposition was reformulated into a null hypothesis thus: there is no relationship between absenteeism and job satisfaction.

Test statistics are as follows:

\[ Df = 1 \]
\[ \text{Calculated } x^2 = 29.1 \]
\[ \text{Critical } x^2 = 10.83 \]
\[ \text{Alpha} = .001 \]
\[ \text{Yule’s Q} = 0.76 \]

**Research Decision:** The value of calculated $x^2$ which is 29.1 is greater than the critical $x^2$ of 10.83 at 99.9% errors. This means that a relationship exist between absenteeism and job satisfaction. The value of Yule’s Q which is 0.76 denotes a strong positive relationship between absenteeism and job satisfaction. Therefore the null hypothesis that there is no relationship between absenteeism and job satisfaction is rejected.

Table 8 presents data for testing the second proposition which states that: The perception of meaningfulness of work is a determinant of absenteeism. This proposition was reformulated into a null hypothesis thus: There is no relationship between absenteeism and the perception of meaningfulness of work.

Test statistics are as follows:

\[ Df = 1 \]
\[ \text{Calculated } x^2 = 10.18 \]
\[ \text{Critical } x^2 = 6.64 \]
\[ \text{Alpha} = .001 \]
\[ \text{Yule’s Q} = 0.47 \]

**Research Decision:** the value of calculated $x^2$ which is 10.18 is greater than the critical $x^2$ of 6.64 at 99.9% errors. This indicates that a relationship exists between absenteeism and the perception of meaningfulness of work: The null hypothesis that there is no relationship between absenteeism and the perception of meaningfulness of work is therefore rejected. The value of Yule’s Q which is 0.47 signifies a moderate positive relationship between absenteeism and the perception of meaningfulness of work.

Table 9 presents data for testing the third proposition which states that: There is a relationship between absenteeism and stress. This proposition was restated in the form of a null hypothesis thus: There is no relationship between absenteeism and stress.

Test statistics are as follows:
\( \text{Df} = 1 \)
\[
\text{Calculated } x^2 = 12.32 \\
\text{Critical } x^2 = 10.83 \\
\text{Alpha} = .001 \\
\text{Yule’s Q} = 0.52
\]

**Research Decision:** The value of calculated \( x^2 \) of 12.32 is greater than the value of critical \( x^2 \) of 10.83 at 99.9\% errors. This implies that a relationship exists between absenteeism and stress. As such, the null hypothesis that there is no relationship between absenteeism and stress is rejected. The value of Yule’s Q which is 0.52 denotes a medium negative relationship between absenteeism and stress.

**4. Discussions**

The study established that a relationship exist between absenteeism and job satisfaction. The value of Yule’s Q which is 0.76 indicates a strong positive relationship between absenteeism and job satisfaction. Also, 79\% of the respondents stated that they were dissatisfied with their jobs.

The point to note is that while high level of job satisfaction may not necessarily result in low rate of absenteeism, low level of job satisfaction is more likely to increase the level of absenteeism. According to Sagie (1998) “workers who are strongly committed to the organization or highly satisfied with their jobs show up at work more than those with weak commitment and low satisfaction”. High level of absenteeism is indicative of employee discontent. Rhodes and steers (1990) maintained that when work is satisfying, people will show up to enjoy it. Job satisfaction engenders positive attitudes towards the organization; and positive attitude can at times serve to “pull” the individual towards the organization and the reverse can be expected when attitudes are more negative (George and Jones, 2002).

Teachers in Nigeria lack sufficient motivation and reward for their service culminating in low morale. A study (Omkokhodion, 2008) revealed that teachers in Nigeria have deep rooted dissatisfaction with their jobs, which manifests in their not wanting their children to become teachers, in the future. Lack of job satisfaction among teachers (especially primary school teachers) in Nigeria is due principally to their poor conditions of service and low career prospects. The survey report by National Steering Group (NSG) showed that teachers’ remuneration and material incentives are generally lower than those of other employees with similar qualifications in the public and private sectors (NSG, 2005).

Results of the study also indicated that there is a relationship between absenteeism and the perception of meaningfulness of work. The Yule’s Q value of 0.47 denotes a moderate positive relationship. One hundred and forty one respondents (70.50\% of sample) perceived their teaching jobs to be of low value or worth.

Occupational status gives a good indication of the meaningfulness or importance/value of one’s work. Compared to other professional occupations, low salaries and poor conditions of service seem to create a poor image of teachers. Teachers in Nigeria, particularly at the primary school level, are generally looked down upon in the society. They are denied the high level of respect and prestige accorded mainstream professionals like Accountants, Medical Doctors, Engineers and Lawyers. In the words of Awanbor (1998) “… the teacher who yesterday was resplendent with honour, brightness, splendour and grace has today been pulled down to grass bereft of nearly everything, except his skin, and pauperized. His profession has been denigrated…” In the same vein, Bennell and Akyeampompong (2007) noted: “Traditionally, the strong intrinsic motivation of teachers has been closely associated with the high status of teachers in society… it is now widely argued that the status of teachers, especially in sub-Saharan Africa, has declined appreciably during recent decades”.

The low status of the teaching profession in Nigeria partly explains why it is increasingly being deserted by men, and is considered fit only for women who are themselves seen as the weaker or inferior sex in the society. Nationally, women dominate the teaching profession at the primary and secondary school levels. For example, the staff disposition for 2008/2009 for the 47 public primary schools in Uyo (see Table 1) showed that there are 153 male teachers (14.34\%) to 914 female teachers (85.66\%) making a total of 1 067 teachers.

Moreover, the research further established that a relationship exist between absenteeism and stress. The Yule’s Q value of -0.52 signifies a medium negative relationship between absenteeism and stress. Though the direction of the relationship between absenteeism and stress is negative, the fact remains that stress is a contributory factor to teacher absences. Majority of the respondents (74.50\%) considered their jobs to be stressful. Stress in the work place is a serious issue as it negatively affects employee health and resultantly causes a decrease in productivity. Job stress, according to Copper (2002), can hinder effectiveness at work and lead to low performance, job
dissatisfaction, poor motivation, absenteeism and turnover.

Regin and Reitzammer (2008) opined that, teachers regardless of what level they teach are exposed to high levels of stress. Olaitan et al (2010) have shown in their study that the teachers’ major sources of stress were colleagues, curriculum, marking or grading, parents, pupils, school authorities, society, supervision / teaching, school environment and wages or income.

Teachers appear to be taking time off work because they are sick and tired of their jobs and are only staying on due to lack of better alternative jobs. On absenteeism, the survey conducted by NSG (2005) revealed that the major reason for teacher absenteeism in Nigeria was ill-health. The working life of the Nigerian primary school teacher could be quite stressful. They work under unpleasant conditions: school infrastructures are dilapidated, deplorable and deliricit, facilities are unsatisfactory, materials and equipments are either unavailable or inadequate, and in most cases the classrooms are overcrowded. For instance, there were 1 067 teachers to 46 164 pupils in the ten schools surveyed giving a ratio of 1:44 (rounded to the next whole number) (see Table 1). All these coupled with other difficult situations associated with day to day living in Nigeria such as economic hardship, general insecurity, transport and housing problems, and frequent power outages makes life (including work life) extremely stressful for teachers.

5. Strategies for Reducing Absenteeism

To increase teachers’ attendance in Nigerian public primary schools, the following strategies are suggested.

5.1 Application of extant rules and regulations

To check or stem the high rate of absenteeism among teachers, there should be stringent procedural measures to raise the absenteeism barrier and make it less simple to report oneself sick or obtain permission to stay away from work. In this regard, an obligation or requirement to produce a medical certificate from a government hospital after one day of absence should be imposed.

5.2 Cultivating a Culture which does not tolerate excessive absences

In this respect, attendance records should be religiously maintained for the purpose of teacher attendance tracking. The attendance record should be reviewed with each teacher every school term or more frequently with those developing absence trends with a view to arresting the undesirable tendency.

5.3 Deliberately improving the economic and social status of teachers

Teachers’ salaries and other material rewards should reflect the value to society of the teaching function; and should compare favourably with salaries paid in other professional occupations requiring similar or equivalent qualifications. Therefore, teachers’ salaries and other material incentives should be reviewed upwards significantly to keep it at par with what is obtainable in comparable professions.

5.4 Provision of conducive working environment

Teachers need a better working atmosphere in the classroom. Primary schools should be rehabilitated and repositioned in order to make them conducive for effective teaching and learning. Adequate infrastructure, facilities and equipments need to be provided in schools if we expect the attendance of teachers to improve. Moreover, the teacher-pupil ratio should be reduced to a maximum of 1:30 to prevent over-crowdiness in classrooms and subsequently, stress on teachers.

5.5 Rewarding attendance

Recognizing and rewarding attendance will send a clear and strong message to the teaching staff that attendance is important and noticed. Teachers with good attendance record should be rewarded in some way such as through commendation letters or even awards.

5.6 Teachers’ empowerment

Teachers should empowered by the adoption of the participatory approach to school administration and management. In this regard, school policies and programmes should be reviewed to identify how teachers can participate in decisions about their jobs.

5.7 Empowering Head Teachers and School Based Management Committees (SBMC)

Head teachers as well as school based management committees should be empowered in terms of being allowed more control with regard to the discipline of their erring teaching staff as this will improve accountability and possibly reduce teacher absenteeism. In fact, teachers must be made aware that they risk termination of appointment for excessive or habitual absenteeism.
5.8 Developing wellness programme

Healthy teachers are less likely to fall ill or report sick, and workplace wellness programmes can encourage good health. Preventive work-oriented health measures such as regular medical screening, fitness assessment, exercise and nutrition prescriptions are associated with better employee health. Wellness programmes can also incorporate measures to reduce stress; as any measure put in place to reduce stress will in turn invariably reduce teacher absenteeism.

5.9 Increased professionalization of teaching

The trend towards the professionalization of teaching in Nigeria should be accelerated. To this end, the National policy to make the Nigeria Certificate of Education (NCE) the minimum teaching qualification should be vigorously pursued and enforced until one hundred percent compliance is achieved. Professionalization of teaching will not only enhance the esteem of professionally qualified teachers but also make them more accountable, as they now have to also abide by the ethics of their profession. It is therefore imperative for professional teachers to be recognized as professionals in their field of work and accorded the recognition and prestige enjoyed by other mainstream professionals in the Nigerian society.

6. Conclusion

The principal conclusion to draw from this study is that absenteeism is significantly related to job satisfaction, meaningfulness of work, and job stress respectively. Job satisfactions, meaningfulness of work and job stress are therefore major determinants of absenteeism. As such, to reduce the rate of teacher absenteeism in government primary schools in Nigeria, measures must be put in place to ensure increased job satisfaction, high status and low stress for teachers. Because people are needed to accomplish work in organizations, some degree of absenteeism is inevitable. Even the most productive and reliable of employees may sometimes take time off work or miss work entirely. Normally, acceptable reasons for absenteeism include ill-health, pregnancy and family problems. Since it is impossible to totally eliminate absenteeism in the workplace; then the only viable option is to manage it effectively in such a way as to keep it low and make it less disruptive to organizational life.

References

Guardian, Thursday; September 29, 2005, P. 16.


Table 1. Summary of teaching staff disposition and enrolment of pupils for 2008/2009 for the public primary schools in Uyo

<table>
<thead>
<tr>
<th>Number of schools</th>
<th>Number of teachers</th>
<th>Total</th>
<th>Number of pupils</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td>1067</td>
<td>Male</td>
</tr>
<tr>
<td>47</td>
<td>154</td>
<td>914</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


Table 2. Teaching staff disposition and enrolment of pupils for 2008/2009 in the selected ten public primary schools in Uyo

<table>
<thead>
<tr>
<th>S/N</th>
<th>Name of School</th>
<th>Number of Teachers</th>
<th>Total</th>
<th>Number of pupils</th>
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</thead>
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<tr>
<td></td>
<td></td>
<td>Male</td>
<td>Female</td>
<td>31</td>
</tr>
<tr>
<td>1.</td>
<td>Government School, Afaha Offot</td>
<td>3</td>
<td>28</td>
<td>42</td>
</tr>
<tr>
<td>2.</td>
<td>Government School, Aka Offot</td>
<td>4</td>
<td>38</td>
<td>53</td>
</tr>
<tr>
<td>3.</td>
<td>Presbyterian School, Enwe Street</td>
<td>7</td>
<td>45</td>
<td>40</td>
</tr>
<tr>
<td>4.</td>
<td>Saint Micheal’s Alc, Efiat Offot</td>
<td>4</td>
<td>36</td>
<td>18</td>
</tr>
<tr>
<td>5.</td>
<td>Government School, Ifa Atai</td>
<td>5</td>
<td>13</td>
<td>18</td>
</tr>
<tr>
<td>6.</td>
<td>Government School, Ikot Ntuen-Oku</td>
<td>4</td>
<td>44</td>
<td>48</td>
</tr>
<tr>
<td>7.</td>
<td>Methodist School, Itiam Etoi</td>
<td>2</td>
<td>34</td>
<td>36</td>
</tr>
<tr>
<td>8.</td>
<td>Offot Jubilees School, Aka Offot</td>
<td>4</td>
<td>28</td>
<td>32</td>
</tr>
<tr>
<td>9.</td>
<td>Offot Central School,</td>
<td>5</td>
<td>17</td>
<td>22</td>
</tr>
<tr>
<td>10.</td>
<td>Q/C Group School, Oku Uyo</td>
<td>1</td>
<td>34</td>
<td>35</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>39</td>
<td>319</td>
<td>356</td>
</tr>
</tbody>
</table>

Table 3. Work attendance: Responses to the question: In general, how would you rate your attendance at work in the last (most recent) six months?

<table>
<thead>
<tr>
<th>Response category</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Absenteeism rating</th>
<th>Rating percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very regular</td>
<td>26</td>
<td>13</td>
<td>Low</td>
<td>40</td>
</tr>
<tr>
<td>Somewhat regular</td>
<td>54</td>
<td>27</td>
<td>Low</td>
<td></td>
</tr>
<tr>
<td>Not too regular</td>
<td>112</td>
<td>56</td>
<td>High</td>
<td>60</td>
</tr>
<tr>
<td>Not at all regular</td>
<td>08</td>
<td>04</td>
<td>High</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>200</td>
<td>100</td>
<td></td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Survey data, 2010.

Table 4. Job satisfaction: Responses to the question: All in all, how satisfied would you say you are with your job?

<table>
<thead>
<tr>
<th>Response category</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Absenteeism rating</th>
<th>Rating percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very satisfied</td>
<td>10</td>
<td>05</td>
<td>High</td>
<td>21</td>
</tr>
<tr>
<td>Somewhat satisfied</td>
<td>32</td>
<td>16</td>
<td>High</td>
<td></td>
</tr>
<tr>
<td>Not too satisfied</td>
<td>110</td>
<td>55</td>
<td>Low</td>
<td>79</td>
</tr>
<tr>
<td>Not at all satisfied</td>
<td>48</td>
<td>24</td>
<td>Low</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>200</td>
<td>100</td>
<td></td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Survey data, 2010.

Table 5. Meaningfulness of work: Responses to the question: on the whole, to what degree do you feel your job is meaningful in terms of perceived value and worth in the society?

<table>
<thead>
<tr>
<th>Response category</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Absenteeism rating</th>
<th>Rating percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very meaningfulness</td>
<td>34</td>
<td>17</td>
<td>High</td>
<td>29.50</td>
</tr>
<tr>
<td>Somewhat meaningfulness</td>
<td>25</td>
<td>12.50</td>
<td>High</td>
<td></td>
</tr>
<tr>
<td>Not too meaningfulness</td>
<td>95</td>
<td>47.50</td>
<td>Low</td>
<td>70.50</td>
</tr>
<tr>
<td>Not at all meaningfulness</td>
<td>46</td>
<td>23</td>
<td>Low</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>200</td>
<td>100</td>
<td></td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Survey data, 2010.

Table 6. Job stress: Responses to the question: All in all, how stressful would you say your job is?

<table>
<thead>
<tr>
<th>Response category</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Absenteeism rating</th>
<th>Rating percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very stressful</td>
<td>49</td>
<td>24.50</td>
<td>High</td>
<td>74.50</td>
</tr>
<tr>
<td>Somewhat stressful</td>
<td>100</td>
<td>50</td>
<td>High</td>
<td></td>
</tr>
<tr>
<td>Not too stressful</td>
<td>31</td>
<td>15.50</td>
<td>Low</td>
<td>25.50</td>
</tr>
<tr>
<td>Not at all stressful</td>
<td>20</td>
<td>10</td>
<td>Low</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>200</td>
<td>100</td>
<td></td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Survey data, 2010.
Table 7. Absenteeism and job satisfaction

<table>
<thead>
<tr>
<th></th>
<th>High</th>
<th>Low</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>32a</td>
<td>48b</td>
<td>80</td>
</tr>
<tr>
<td>High</td>
<td>10c</td>
<td>110d</td>
<td>120</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>42</strong></td>
<td><strong>158</strong></td>
<td><strong>200</strong></td>
</tr>
</tbody>
</table>

Source: Survey data, 2010

Table 8. Absenteeism and meaningfulness of work

<table>
<thead>
<tr>
<th>Meanings of work</th>
<th>High</th>
<th>Low</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>34a</td>
<td>46b</td>
<td>80</td>
</tr>
<tr>
<td>High</td>
<td>25c</td>
<td>95d</td>
<td>120</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>59</strong></td>
<td><strong>141</strong></td>
<td><strong>200</strong></td>
</tr>
</tbody>
</table>

Source: Survey data, 2010

Table 9. Absenteeism and stress

<table>
<thead>
<tr>
<th>Stress</th>
<th>High</th>
<th>Low</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>49a</td>
<td>31b</td>
<td>80</td>
</tr>
<tr>
<td>High</td>
<td>100c</td>
<td>20d</td>
<td>120</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>149</strong></td>
<td><strong>51</strong></td>
<td><strong>200</strong></td>
</tr>
</tbody>
</table>

Source: Survey data, 2010

**Formula**

Chi-square $\chi^2 = \frac{n(ad - bc)^2}{(a + b)(a + c)(c + d)(b + d)}$

Degree of freedom = $(C-1)(R-1)$

C = Column

R = Rolls

Yule’s $Q = \frac{ad - bc}{ad + bc}$