FACTORS THAT INFLUENCE JOB SATISFACTION OF TELEWORKERS: EVIDENCE FROM MEXICO
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ABSTRACT

Changes that society undergoes due to factors such as information, communication and changes in organizations, generate new forms of work and different factors of job satisfaction. Telework presents a flexible form of work organization. In view of these changes, teleworkers modify their work processes. The present study identifies factors that influence the job satisfaction of teleworkers in Mexican companies. We analyzed 247 teleworkers from different companies. We worked with the dependent variable teleworker job satisfaction and the independent variables, amount of work, work load, training, environmental conditions, work independence, promotion possibilities, relationship with supervisor, stability and job security. We find that job satisfaction is driven by the tasks assigned to the position, training obtained from the company, the relationship with his supervisor and the environmental conditions of the workplace. Stability, job security and possibilities of promotion and growth statistically have low relation with job satisfaction.

JEL: M12, M55, O3, 031, 032

KEYWORDS: Teleworking, Factors, Job Satisfaction, Mexican Companies

INTRODUCTION

Technological changes generate new life styles and changes in the world of work. As a result, organizations must generate new strategies that reflect the characteristics of the current workforce. These characteristics include working conditions, labor relations, productivity and job satisfaction. It is important that the company achieves a balance of family needs and professional development of the worker. Telework plays an important role, as it presents an alternative form of labor organization that reflects the new workforce. Teleworking has three important elements as proposed by Ugarte (2004) and Thibault (2001) these are: a) the geographic or locative element: which assumes that teleworking is first and foremost a type of distance work; b) the technological or qualitative element of remote work, requires the intensive use of a specific technology that allows for the development of a productive task outside the organizations center of operations; and c) the organizational element allows working remotely and using telecommunications and information technology. Through the use of these elements services are provided in a different way.

Telework involves not just anyone who uses the tools of teleworking. Rather it involves using these tools to escape traditional ways of working within the organization. Teleworking is a different way of organizing and carrying out work, in a context of decentralized work activities that were previously carried out in the company operations center (Vittorio, 2004). Bauregard and Henry (2009) show that employees who telework tend to experience higher levels of satisfaction than those who do not.

Telework decreases the contact between superiors and subordinates as noted by Gala (2001). A disadvantages, for the teleworker occurs if there is a sense of isolation. The lack of supervision might result in a lack of motivation. Negative reactions to management changes, when these are not accepted by
managers or staff of the company, hinders the security of information by streaming through external networks to the company.

In a study on work-family enrichment Pérez (2014), notes the relationship between availability and adoption of flexible practices with job satisfaction and the organizational commitment of the employees. Employees that telecommute obtain social resources of the communication and interaction with their companions. These types of resources can function as social support resource by stimulating positive experiences at work that lead to a general feeling of a positive affect. Confidence and additional personal energy drives employees in both personal and work areas (Hunter et al., 2010).

Osio, (2010) studied teleworking. He notes an option in the digital age of not going to a place of work and not having relations with other workers can produce a feeling of isolation in the worker. This isolation might adversely affect worker performance. The objective of this research is to identify factors that influence the job satisfaction of teleworkers. We identify significant variables related to the labor relations of teleworkers.

The remainder of the paper is organized as follows. The next section provides a brief literature review. The following section provides a discussion of the methodology used, sample size and timeframe. Next, the results are introduced and discussed. The paper closes with some concluding comments and suggestions for further research.

**LITERATURE REVIEW**

Teleworking was defined for the first time in the 1970s by Jack Nilles, as: "any form of substitution displacements related to work activity by information technologies" Thibault (2001). Teleworking is a flexible form of work organization that consists of the performance of the professional activity without the physical presence of the worker in the company, and implies the permanent use of some means of communication for contact between the worker and company (Gray, Hodson & Gordon, 1995). The purpose of health at work is to achieve the promotion and maintenance of the highest degree of physical, mental and social well-being of workers in all work (OTI, 2003). Sparks, Faragher & Cooper (2001) note that changes generated by the new working conditions give rise to new conceptions of the nature of organizational welfare, health and safety at work. Based on this, the following factors associated with Satisfaction were analyzed.

*Satisfaction and Labor Dissatisfaction*: Research shows that factors involved in producing satisfaction (and motivation) at work are somewhat separate and distinct from those that lead to dissatisfaction at work. Thus, we must consider separate factors, depending on whether satisfaction or dissatisfaction is analyzed. It follows that these two feelings are not opposed to each other. The opposite of satisfaction at work is not dissatisfaction. On the other hand, lack of satisfaction and, evenly, the opposite of dissatisfaction is not satisfaction, but lack of dissatisfaction. Herzberg's bifocal theory states that motivation is generated by the search for an optimal satisfaction of certain needs, which produce job satisfaction (López, 2005).

Given that work is a central aspect of people's lives (Luque, Gómez & Cruces 2000), argue that workers must have a safe and healthy work environment. Organizations, should promote healthy work environments that promote job satisfaction and well-being and an optimal quality of working life (Seabury, Lakdawalla and Reville 2005).

*Amount of work*: Teleworking modifies the structures of space and time at work. Given that physical limits and temporary structures of the workplace have traditionally been used to control employees, their elimination in the framework of telework can be interpreted as an increase in the autonomy of employees. Changes in supervision, as well as spatial and temporal flexibility, can give autonomy to teleworkers.
According to the literature review of Bailey & Kurland (2002) the effects of teleworking could diminish or disappear as the frequency of telework decreases. However, few studies consider this variable.

**Tasks Assigned:** Burawoy (1985) argues that capitalists continuously transform production through the extension of the working day, the intensification of work and the introduction of new machines that seek to produce at the lowest possible cost (Higuita, 2010). They do not worry about worker welfare. From an economic perspective it could be argued that efficiency is related to the rational use of resources (Koontz, 1999, p.12). (Maruyama, Hopkinson, & James, 2009) analyzed the responses of 1566 teleworkers and determined that more time telecommuting results in a better the balance of work life. According to the researcher, saving time in transfers from home to work enables people to have more time to attend to family matters.

**Job training:** A training process is composed of several phases, which must be mastered and applied, before carrying out any training action. With regard to training for change, the phases are the same, but the content and scope of each is different. Determination of the needs, establishment of the objectives, determination of the actions (training plan), preparation of the programs, development of the methodology, measurement of the results, and follow-up are important elements of the process (González & Tarragó, 2008).

**Environmental conditions:** One argument that affects the interest of people to telecommute is the possibility of having a more quiet environment to concentrate. Working in offices can result in many distractions that make it difficult to carry out tasks (Peters, Tijdens, & Wetzels, 2001). The effectiveness of telework could be moderated by the way the physical work space is adapted (Kossek, Lautsch, & Eaton, 2005). Indeed, a main symbol that people use to separate the link between work environment and family environment is the physical space (Fonner & Stache, 2012). The construction labor conditions index by states for Mexico shows that the states with the best conditions are in general the northern states: Coahuila, BCS, Aguascalientes, Nuevo Leon, BC and Chihuahua (Rodríguez & Oreggia, 2009).

**Work independence:** Beltrán and Sánchez (2002) maintain that the appearance of teleworking brings great benefits to companies, such as an increase in productivity, labor independence, the reduction of absenteeism, the reduction of fixed costs and the flexibilization of the working day.

**Work Promotion:** Many teleworkers fear that not being seen in the office or of not establishing personal relationships, "face to face" with their bosses is a disadvantage. However, a study conducted by the Small Business Administration in 1993 concluded that teleworkers obtain promotions in greater proportion than those who go every day to the office. The firm, Find/SVP, says that an increasing proportion of these teleworkers are employed by medium and small companies (Finquelievich, 1998).

**Employment relationship:** A contextual element that can moderate the effects of teleworking is the management style of the supervisor. Wiesenfeld, Raghuram, and Garud (1999) pointed out that control methods for worker supervision can be dysfunctional for those who telecommute. At the same time, Pyöräiä (2011) and Golden (2009) mention that for teleworking to work, it is necessary for supervisors to leave traditional management based on control and focus more on results-based management. The previous conclusion is also reaffirmed by Mello (2007) who states the appropriate teleworking officer depends on the supervisor feeling comfortable delegating the responsibilities of the whole unit of work and giving discretion to the way the subordinate completes the work assignments. In addition, flexibility allows teleworkers to better organize their time, which allows them to have less conflict between work and family (Kossek, Lautsch and Eaton, 2006).

**Stability and job security:** technical specialization, continuous training, safety and health at work, social protection, collective representation of professional interests, negotiation of working conditions and job
search, have very different profiles for which fully satisfactory solutions have not been identified (Sánchez, 1994: 13). The Labor Law must act in correspondence with these changes. In recent years, regulations in the field of occupational safety and health have emerged thinking of "good employment" which is associated with the conditions of quality of working life (Bourhis & Mekkaoui, 2010).

METHODOLOGY

This study was conducted from October to November 2016 in Chihuahua, México. The sample size was selected from a population who uses technology for work and household tasks and with a college degree (Bachelor's degree, Master's and Doctorate). To determine the population and sample size, we use the 2015 Household Availability and Use of Information Technologies Report from the Instituto Nacional de Estadística y Geografía (INEGI) (INEGI, 2015). The analysis considers individuals who (1) live in Chihuahua, (2) have a Bachelor's (Licenciatura), Master's or Doctorate degree, (3). We examined individuals who do teleworking, remote work or computer work-related activities from home. We identified 64,955 individuals who met these characteristics. From this population, we selected a sample size of 382 individuals. We used Survey Monkey to contact our survey. From the 382-surveyed individual, we were able to use 247 completed and valid surveys in this study, leaving us with confidence level of 95% and margin of error of 6.25%.

We analyzed job satisfaction as the dependent variable and, amount of work, tasks in charge, training, environmental conditions, work independence, promotion possibilities, relationship with the supervisor, stability and job security as independent variables. We followed Solís’ (2015), validated by Gutek, Searle and Klepa (1991) methodology. We use Saxena, Ansari and Shankar (1995) instrument. Our objective was to determine what factors influence job satisfaction of telecommuters in Mexican companies.

Job Satisfaction was measured by an item that indicates how satisfied the teleworker is. The response scale used for this item was: very satisfied, satisfied, neither satisfied nor dissatisfied, dissatisfied, very dissatisfied.

The independent variables: Amount of work, tasks at work, job training, environmental conditions, work independence, job promotion possibilities, relationship with the supervisor, stability and safety, were evaluated by means of an item. The response scale used for this item was: very satisfied, satisfied, neither satisfied nor dissatisfied, dissatisfied, very dissatisfied. The control variables were sex and age. We utilized statistical correlation techniques. The data were calculated with the statistical package Minitab 17, as well as the use of Excel to graph the expected results.

RESULTS AND DISCUSSION

This study aims to determine factors that influence job satisfaction of telecommuters in Mexican companies. We analyzed 247 telecommuters from different companies. The survey was applied to 60 male and 40 females with ages ranging from 22 to 61 years and having a college degree (Bachelor, Master's and Doctorate). Telecommuters were employed by companies in different sectors of the economy and work in a place outside the company for which they are hired. Due to incomplete or invalid data entry, we were able to use only 247 of 382 surveys in this study. Table 1 present Pearson correlation analysis and Table 2 shows Chihuahua teleworkers perceived job satisfactions as percentages.
Table 1: Averages, Standard Deviation and Correlations of the Variables Under Study

Panel A: Analysis

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Work Satisfaction</th>
<th>Amount of Work</th>
<th>Homework</th>
<th>Training</th>
<th>Environmental Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount of work</td>
<td>3.891</td>
<td>0.848</td>
<td>0.355</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tasks Assigned</td>
<td>3.960</td>
<td>0.731</td>
<td>0.446</td>
<td>0.666</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Training</td>
<td>3.822</td>
<td>0.967</td>
<td>0.398</td>
<td>0.536</td>
<td>0.605</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmental conditions</td>
<td>3.798</td>
<td>0.906</td>
<td>0.419</td>
<td>0.563</td>
<td>0.583</td>
<td>0.525</td>
<td></td>
</tr>
<tr>
<td>Relationship with supervisor</td>
<td>3.927</td>
<td>0.951</td>
<td>0.354</td>
<td>0.424</td>
<td>0.469</td>
<td>0.467</td>
<td>0.365</td>
</tr>
</tbody>
</table>

Panel B: Analysis

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Work Satisfaction</th>
<th>Possibilities of promotion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work Independence</td>
<td>3.676</td>
<td>1.400</td>
<td>0.392</td>
<td></td>
</tr>
<tr>
<td>Possibilities of promotion</td>
<td>3.656</td>
<td>1.051</td>
<td>0.339</td>
<td>0.418</td>
</tr>
<tr>
<td>Stability and job security</td>
<td>3.911</td>
<td>0.980</td>
<td>0.274</td>
<td>0.314</td>
</tr>
</tbody>
</table>

Table 1 shows the Pearson correlation analysis for all the variables used for the study. Panel A includes the variables such a job satisfaction with significant correlation (P-value < .05). Panel B includes the variables that did not have a significant correlation (P-value > .05).

Table 2: Satisfaction Level per Variable (Percentage)

<table>
<thead>
<tr>
<th>Item</th>
<th>Very Satisfied</th>
<th>% Satisfaction Scale</th>
<th>% Neither Satisfied Nor dissatisfied</th>
<th>% Dissatisfied</th>
<th>% Very Dissatisfied</th>
<th>% Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Work Satisfaction</td>
<td>59</td>
<td>23.8</td>
<td>122</td>
<td>49.3</td>
<td>53</td>
<td>21.4</td>
</tr>
<tr>
<td>2. Amount of Work</td>
<td>50</td>
<td>20.4</td>
<td>139</td>
<td>56.2</td>
<td>40</td>
<td>16.1</td>
</tr>
<tr>
<td>3. Type of work assigned</td>
<td>51</td>
<td>20.6</td>
<td>144</td>
<td>58.2</td>
<td>44</td>
<td>17.8</td>
</tr>
<tr>
<td>4. Job Training and development</td>
<td>66</td>
<td>26.7</td>
<td>98</td>
<td>39.6</td>
<td>60</td>
<td>24.2</td>
</tr>
<tr>
<td>5. Environmental Conditions</td>
<td>48</td>
<td>19.4</td>
<td>128</td>
<td>51.8</td>
<td>50</td>
<td>20.4</td>
</tr>
<tr>
<td>6. Work Independence</td>
<td>71</td>
<td>28.4</td>
<td>123</td>
<td>49.7</td>
<td>41</td>
<td>16.5</td>
</tr>
<tr>
<td>7. Work Promotion</td>
<td>55</td>
<td>22.6</td>
<td>94</td>
<td>38.0</td>
<td>67</td>
<td>27.1</td>
</tr>
<tr>
<td>8. Relation with Supervisor</td>
<td>78</td>
<td>31.5</td>
<td>93</td>
<td>37.6</td>
<td>61</td>
<td>24.6</td>
</tr>
<tr>
<td>Job Security</td>
<td>71</td>
<td>28.7</td>
<td>111</td>
<td>44.9</td>
<td>46</td>
<td>18.6</td>
</tr>
<tr>
<td>Total</td>
<td>549</td>
<td>100</td>
<td>1052</td>
<td>100</td>
<td>462</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 2 shows the results of a survey conduction during 2016 to 247 Mexican workers. The survey explored indicators of job satisfaction as perceived teleworkers. Results are presented by variable and per scale (Very Satisfied, Neither satisfied nor dissatisfied, Dissatisfied and very dissatisfied). Totals are also presented per variable.

As Table 2 shows teleworks in Chihuahua perceived job satisfactions as follows: Work Satisfaction: Of the 247 telecommuters surveyed, 23.8% (59) telecommuters responded to be very satisfied, 49.3% (122) satisfied, 21.4% (53) Neither satisfied, nor dissatisfied, 4.0% (10) dissatisfied and 1.2% (3) of the teleworkers very dissatisfied.

Amount of Work: Of the 247 telecommuters surveyed, 20.4% (50) indicated that they were very satisfied, 56.2% (139) satisfied, 16.1% (40) indicated that they were neither satisfied nor dissatisfied, 6.8% (7) dissatisfied and 40% (1) very dissatisfied with the amount of work assigned by the company where they work.

Type of work assigned: 20.6% (51) of teleworkers surveyed indicated that they are very satisfied, 58.2% (144) indicate very satisfied, 17.8% (44) were neither satisfied nor dissatisfied, 2.8% (17) dissatisfied and 40% (1) very dissatisfied with the tasks entrusted to their Job title.
Job Training and Development: Of the 247 telecommuters surveyed, 26.7% (60) expressed their satisfaction, 39.6% (90) were satisfied, 24.2% (60) were neither satisfied nor dissatisfied, 7.6% (19) were dissatisfied and 1.6% (4) were very dissatisfied with the probability receiving training or offered formal education by the company for which they work.

Environmental Conditions: 19.4% (48) of the surveyed workers were very satisfied with the environmental conditions of their place of work. 51.8% (128) were satisfied, 20.4% (50) were neither satisfied nor dissatisfied, 6.0% (15) were dissatisfied and 2.4% (6) were very dissatisfied.

Work Independence: 28.4% (71) Teleworkers were very satisfied with level of work independence given by the company they work, 49.7% (123) indicated satisfied, 16.5% (41) responded neither satisfied nor dissatisfied, 3.2% (8) indicated dissatisfied, and 1.6% (4) stated that they were very dissatisfied with their independence.

Work Promotion: From the survey applied to the 247 telecommuters, 22.6% (55) Telecommuters expressed being very satisfied with the possibilities of promotion offered by the company, 38.0% (94) stated satisfied, 27.1% (67) responded neither satisfied nor dissatisfied, 8% (20) indicated that they were dissatisfied and 4.4% (11) indicated very dissatisfied with the possibilities of promotion offered by their company.

Relation with Supervisor: 31.5% (78) telecommuters indicated they were very satisfied and having a good relationship with their supervisor, 37.6 (93) stated they were satisfied, 24.6% (61) indicated neither satisfied nor dissatisfied, 4% (10) expressed dissatisfaction and 2% (5) indicated very dissatisfied with the relationship they have with their supervisor.

Job Security: 28.7% (71) of the teleworkers surveyed indicated they were satisfied to their job security, 44.9% (111) responded satisfied, 18.6% (46) indicated neither satisfied nor dissatisfied, 4% (10) were dissatisfied and 3.6% (9) were very dissatisfied with their job security.

CONCLUSION

This study determines factors that influence the job satisfaction of telecommuters in Mexican companies. We analyzed 247 telecommuters from different companies. A survey was applied to 60% male and 40% females with ages ranging from 22 to 61 years and having a college degree (Bachelor, Master's and Doctorate). Telecommuters were employed by companies in different sectors of the economy and work in a place outside the company for which they are hired. We used Survey Monkey to apply a questionnaire the 382-surveyed individuals. However, due to incomplete or invalid data entry, we were able to use only 247 surveys in this study.

Evidence shows that job satisfaction is high among telecommuters. More than half, 73.1% of the telecommuters surveyed responded to be satisfied with their work. A lower percentage of them 26.6% said they were undecided, dissatisfied and very dissatisfied with the work they perform. When evaluating the variable amount of work, we found positive perceptions, where 76.6% said they were satisfied and only 23.3% of them indicate being undecided or dissatisfied. Tasks assigned presented similar results, where 78.8% of the workers responded to be satisfied with the tasks assigned and only 21% indicate to be dissatisfied or very dissatisfied.

The results for job training were slightly lower but still positive, where 66.3% responded to be satisfied with job training possibilities and 33.4% were unsatisfied or unhappy with the company offering of job training or education. With regard to working conditions, most telecommuters surveyed, 71.2% were satisfied with the environmental conditions and only 28.8% of respondents indicated that they were undecided or dissatisfied with the workplace environmental conditions. Independence at work also presented high levels
of satisfaction, where 78.1% of respondents were satisfied with the level of independence and only 21% were undecided or dissatisfied in this work aspect.

When analyzing job promotion, we discovered the level of satisfaction was not high. Some 60.6% of the teleworkers surveyed said they were satisfied with the company's policies regarding job promotion, with 39.5%, percentage being undecided or dissatisfied with possibilities of job growth within the company. Relationship with supervisor also presented high level of satisfaction. 73.6% of Telecommuters responded to be satisfied in the relationship with their supervisor and 30.6% were undecided and dissatisfied with the relationship with their supervisor. Job security shows that 73.6% of the workers surveyed responded to be satisfied with the stability and job security they perceived at work and 26.2% said they were undecided and dissatisfied their job security.

Relationship with the supervisor and tasks assigned were the variable with the highest level of satisfaction. On the other hand, teleworkers reported lower level of satisfaction for the variables job promotion. Further research may extend the analysis to determine the underline causes of lower level of satisfaction for job promotion. Teleworking is a new form of work used by a large number of companies in Mexico. Monitoring and evaluation of working conditions for telecommuters are important and offer opportunities for future research.

REFERENCES


**BIOGRAPHY**

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