A STUDY OF ORGANIZATIONAL COMMITMENT, JOB SATISFACTION AND OCCUPATIONAL ROLE STRESS ON ORGANIZATIONAL CITIZENSHIP BEHAVIOR AMONG INFORMATION TECHNOLOGY (IT) PROFESSIONALS IN INDIA

“An organizational citizenship behavior is an “individual behavior that is discretionary, not directly or explicitly recognized by the formal reward system, and that in the aggregate promotes the effective functioning of the organization.”

Organ (1988)

INTRODUCTION

Organization citizenship behavior (OCB) is a term that encompasses voluntary positive behavior of employees of an organization, which support and benefit the organizations. The employees who engage in organizational citizenship behavior may not always be the top performers but they are ones who always make effort to ‘go the extra mile’ or ‘go above and beyond’ the minimum performance required to do a job satisfactorily that’s why OCB can also be termed as positive extra-role behavior, means performing above and beyond the formal role. Organizational Citizenship Behavior (OCB) is one of the most widely studied topics in organizational behavior research in recent years (Podsakoff et al. 1993; Hannam and Jimmieson, 2002; Zeuars et al. 2000; Ensher et al. 2001; Jahangir et al. 2004; Lievens and Anseel, 2004; Emmerik et al., 2005; Khalid and Ali, 2005). This concept was introduced by Bateman & Organ in 1980s and latter on refined and strengthened by number of researchers such as Podsakoff and Mackenzie (1993), Jahangir et al., (2004); Khalid and Ali (2005).

Organizational citizenship behavior is discretionary; here discretionary mean that the behavior is not an enforceable requirement of the role or the job description, the behavior is rather a matter of personal choice, such that its omission is not generally understood as punishable (Organ, 1988). If an organization has high level of OCB tendencies among its employees then its functioning would be effective and efficient because of support, cooperation and commitment of its employees with their organization. OCB is linked to lower rates of employee turnover and absenteeism, while at the organizational level, it results in increased productivity, efficiency and customer satisfaction, as well as in reduced costs, has also been observed (Podsakoff et al, 2009).
It has been observed in the past that Organizational citizenship behavior helps and supports co-workers, working overtime without expectation of remuneration and volunteering to organize office-wide functions. This kind of behavior shows supportive and committed attitude of the employees towards their organization that will become an aid to improve or enhance the effectiveness and functioning of the organization. The OCB enhances organizational effectiveness from almost 18 to 38 percent across different dimensions of measurement of (Podsakoff, MacKenzie, Paine & Bachrach, 2000; Ehrhart, 2004). The engagement of employees in OCB is beneficial to them also. It is found that the workers who engage themselves in OCB tend to receive better performance ratings by their managers (Podsakoff et al., 2009).

The OCB as Contextual Performance is defined as “performance that supports the social and psychological environment in which task performance takes place” (Organ, 1997). This is a revised definition given by organ in 1997 in which OCB explained as “non task performance” that contribute to the maintenance and/or enhancement of the context of “task performance”. The extensive review of literature related to OCB reveals several factors which influence or have impact over the OCB are identified such as job satisfaction (moorman, neihoff and organ; Jehad Mohammad, Farzana and Mohmad Adnan, 2011), organizational commitment (moorman, neihoff and organ; kursad and omay, 2008 ; arti, atul and kuldeep, 2011), Procedural Justice(moorman, neihoff and organ), perceived fairness(organ and ryan, 1995 ; podsakoff, mackenzie, paine and bachrach, 2000), leader supportiveness (organ and ryan, 1995 ; podsakoff, mackenzie, paine and bachrach, 2000).

1.1 Dimensions of Organizational Citizenship Behavior

The Organ (1988) has identified five OCB dimensions namely altruism, courtesy, civic virtue, conscientiousness and sportsmanship. This is also known as Five Factor Model or Five-Dimension taxonomy. **Altruism**, which refers to helping behaviors of members of organization aimed at other members of organization; **Conscientiousness**, which refers to helping behaviors of members of organization aimed at the organization as a whole; **Sportsmanship**, which refers to the willingness on the part of the employee to tolerate less than ideal circumstances without complaining; **Courtesy**, which refers to actions of employees aimed at the prevention of future problems; and **Civic virtue**, which refers to a behavior of organizational member show concern about the life of the organization.
2. PROFILE OF IT INDUSTRY IN INDIA

For years on end, technology has continued to take the world by surprise, enabling an industrial revolution, economic change as well as social transformation. Likewise, Information technology’s advancements and results continue to spread at a rapid pace, as does humanity’s dependence on technology. This probably explains the fact that despite global uncertainties, natural disasters and low consumer confidence in the past years, global spending on technology continued, and demand for global sourcing for IT services remained strong.

The IT industry in India has played a very crucial role in placing India on the world map. The ability to sync with global trends and the intent on building a global delivery model has made India to significantly increase its market share in the global sourcing landscape, from 55 per cent in 2010, to 58 per cent in 2011 (IT-BPO SECTOR IN INDIA, STRATEGIC REVIEW 2012 by NASSCOM). Despite the global meltdown in the year 2009 it is showing a steady growth. When the whole of the world witnessed the negative growth, Indian IT industry still managed to register a growth of 5.5 percent. While the growth in IT spend is expected to be gradual over the next two-three years, global sourcing spend is seen to outpace this growth. The Indian supply base with its two decade long experience, mature service capabilities, global footprint and an abundant talent pool promises to be an emerging landmark for full fledged IT advancements.

2.1 The Present Scenario of IT Industry in India

The Financial Year 2012 is a landmark year. Despite the IT Industry weathered uncertainties in the global business environment, this year is expected to cross USD 100 billion. As a proportion of national GDP, the sector revenues have grown from 1.2 per cent in Financial Year 1998 to an estimated 7.5 per cent in Financial Year 2012. The domestic IT products segment is set to grow to 180 billion in Financial Year 2012, a growth of approximately 13 per cent over Financial Year 2011. This segment is being driven by the need to replace legacy systems and technology advancements around cloud, mobility, etc. Export revenue (excluding hardware) during Financial Year 2012 is likely to reach USD 69 billion, accounted for by about a 2.2 million workforce. This represents a growth of 16.3 percent. The industry continues to be a net employment generator - expected to add 230,000 jobs in Financial Year 2012, thus providing direct employment to about 2.8 million, and indirectly employing 8.9 million people. As a
result, the IT market is expected to grow in parallel with the growth of the Indian economy.

2.2 The Leading IT Companies in India

There are several agencies who identify every year the leading IT Companies based on some criteria such as: sales turnover, profitability and, headcounts etc. The National Association of Software and Services Companies (NASSCOM) is one of them and almost all IT Companies in India are member of this association. NASSCOM has been ranking its member companies on the basis of their financial performance since the past few years. NASSCOM collects financial and other information from its member companies through a survey conducted annually and then member companies are ranked based on the data collected. The leading IT Companies in India (2011-12) as surveyed by the NASSCOM is tabulated below:

Table 1 - Leading IT Companies in India 2011-12

<table>
<thead>
<tr>
<th>S.No</th>
<th>Company Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Tata Consultancy Services Ltd*</td>
</tr>
<tr>
<td>2</td>
<td>Infosys Ltd*</td>
</tr>
<tr>
<td>3</td>
<td>Wipro Ltd*</td>
</tr>
<tr>
<td>4</td>
<td>HCL Technologies Ltd</td>
</tr>
<tr>
<td>5</td>
<td>Mahindra IT &amp; Business Services</td>
</tr>
<tr>
<td>6</td>
<td>Mphasis Ltd</td>
</tr>
<tr>
<td>7</td>
<td>Igate</td>
</tr>
<tr>
<td>8</td>
<td>Larsen &amp; Toubro Infotech Ltd</td>
</tr>
<tr>
<td>9</td>
<td>Syntel Ltd</td>
</tr>
<tr>
<td>10</td>
<td>CSC, India</td>
</tr>
</tbody>
</table>

*Source: NASSCOM (http://www.nasscom.in/industry-ranking, accessed on 01 December 2012)

*indicates the selected IT Companies for the proposed research

A brief about the three selected IT Companies: Tata Consultancy Services Limited, Infosys Limited, and Wipro Limited is described below:
2.2.1 Tata Consultancy Services Ltd

Tata Consultancy Services Limited was established in the year 1968 as a part of the Tata Group. It is a public limited company headquartered in Mumbai, India. TCS Ltd. is an IT services, business solutions and outsourcing organization, listed on the Bombay Stock Exchange (BSE) and the National Stock Exchange (NSE) of India. TCS has over 254,000 of the world’s best-trained IT consultants in 45 countries, thus making it a global brand. The category wise break-up of total workforce of TCS Ltd. is shown in figure 1.

![Figure 1: The category wise of workforce in TCS Ltd.](source: corporate Sustainability Report 2011-12 – TCS Ltd.)

2.2.2 Infosys Ltd.

Infosys started in the year 1981 with an initial capital of US $250, has now become a global giant with revenues of US $6,994 million. Infosys Limited is headquartered in Bangalore, India. It is a multinational provider of business consulting, technology, engineering, and outsourcing services. It became the first IT Company from India to be listed on National Association of Securities Dealers Automated Quotations (NASDAQ). Infosys has over 145000 employees in 32 countries thus ensuring its global footprint. The category wise break-up of total workforce of Infosys Ltd. is shown in figure 2.
2.2.3 Wipro Ltd.

Wipro was formerly incorporated in 1945 as Western India Products Limited and latter on abbreviated as Wipro. It is an Indian multinational provider of information technology (IT) services, consulting and outsourcing services, headquartered in Bangalore, India. Starting off with consumer products business, Wipro then diversified into newer areas including IT hardware and IT services. Wipro has over 130,000 employees and a worldwide presence with global centers across 54 countries.

The category wise break-up of total workforce of Infosys Ltd. is shown in figure 3.

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Figure 2: The category wise of workforce in Infosys Ltd.
Source: Sustainability Report 2011-12 – Infosys Ltd.

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Figure 3: The category wise of workforce in Wipro Ltd.
Source: The Imperative of Hope– Wipro Sustainability Report 2010-11
3. REVIEW OF LITERATURE

A detailed survey of the Literature of Organizational Citizenship Behavior is carried out to develop a conceptual framework for the proposed study, which is prescribed below:

Organizational Citizenship Behavior

Hardeep Chahal & Shivani Mehta (Oct 2010 – Mar 2011) “Antecedents and Consequences of Organizational Citizenship Behavior (OCB): A Conceptual Framework in Reference to Health Care Sector” (published in Journal of Services Research) studied the theoretical and conceptual framework of OCB in reference to Health Care Sector with the objective to provide roadmap for the health care organizations in strengthening the relationship with patients, building strong image and competitive advantage over competitors through patient satisfaction and loyalty. This theoretical and conceptual framework of OCB includes the definition of OCB, its dimensionality from the different views of scholars, and its antecedents and consequences. Figure 4 is showing the antecedents and consequences of OCB in reference to health care sector identified under this study.

Figure 4 is showing the Antecedents and Consequences Framework of OCB

Nathan P. Podsakoff, Steven W. Whiting and Philip M. Podsakoff, Brian D. Blume (2009) “Individual- and Organizational-Level Consequences of Organizational Citizenship Behaviors: A Meta-Analysis” (published in Journal of Applied Psychology) analyzed the relationships between OCBs and a variety of individual- and organizational-level outcomes. Results indicate that OCBs are related to a number of

Figure 4: Conceptual Framework of OCB
individual-level outcomes, including managerial ratings of employee performance, reward allocation decisions, and a variety of withdrawal-related criteria (e.g., employee turnover intentions, actual turnover, and absenteeism). In addition, OCBs were found to be related to a number of organizational-level outcomes (e.g., productivity, efficiency, reduced costs, customer satisfaction, and unit-level turnover).

Guy Pare, Michel Tremblay & HEC Montreal (2007), “The Influence of High Involvement Human Resources Practices, Procedural Justice, Organizational Commitment, and Citizenship Behaviors on Information Technology Professionals’ Turnover Intentions” (Published by: http://www.sagepublications.com On behalf of: Eastern Academy of Management) investigated the effects of high-involvement HR practices on turnover intentions mediated by procedural justice, organizational commitment, and citizenship behaviors. The key findings by using Structural Equation Modeling reflect a negative and significant coefficient path linking OCB-helping behaviors to turnover intentions. Affective commitment has a significant positive influence on OCB-helping behaviors, whereas the coefficient for the path linking continuance commitment to OCB is not significant.

Organizational Commitment and Organizational Citizenship Behavior

Arti Bakhshi, Atul Dutt Sharma, Kuldeep Kumar (2011) “Organizational Commitment as predictor of Organizational Citizenship Behavior” (published in European Journal of Business and Management) examined the linkages between Allen and Meyer's (1991) three component model of organizational commitment and organizational citizenship behavior. It is found that three components of organizational commitment were positively correlated with aggregate measure of OCB and out of three components normative commitment has a significant impact on OCB.

Kursad Yilmaz and Omay cokluk-Bokeoglu (2008) “Organizational Citizenship Behaviors and Organizational Commitment in Turkish Primary Schools” (published in World Applied Sciences Journal) examined the structure of organizational citizenship behavior and its relation to organizational commitment in Turkish primary schools. Findings reflect that teachers’ perceptions of organizational commitment are positive; mean of teachers’ perceptions of organizational citizenship is moderate, and a positive and significant relationship between teachers’ perception of organizational commitment and organizational citizenship behavior.
Job Satisfaction and Organizational Citizenship Behavior

Jehad Mohammad (2011) “Job Satisfaction and Organizational Citizenship Behavior: An Empirical Study at Higher Learning Institutions” (published in Asian Academy of Management Journal) measured the two dimensions of organizational citizenship behavior (i.e. OCBI and OCBO) and examined the relationship between these dimensions of organizational citizenship behavior and the two facets of job satisfaction (intrinsic and extrinsic). The findings indicate that intrinsic and extrinsic job satisfaction is significantly and positively associated with OCBO but not with OCBI and both intrinsic and extrinsic job satisfaction are important variables in predicting the citizenship behaviors but the strength of effects of intrinsic and extrinsic job satisfaction on OCBO were more statistically visible than on OCBI.

Gregory Murphy, James Athanasou, Neville King (2002) "Job satisfaction and organizational citizenship behaviour: A study of Australian human-service professionals" (published in Journal of Managerial Psychology) explained the two aspects of organizational citizenship behavior; one is rated organizational citizenship behavior and second is actual behavioral measures of organizational citizenship behavior and examined their relationship within themselves and with job satisfaction. The result shows that job satisfaction is positively correlated with organizational citizenship behavior to a degree which indicates a medium to strong relationship.

Organizational Stress and Organizational Citizenship Behavior

Ajay K. Jain & Cary L. Cooper (2012) "Stress and organizational citizenship behaviors in Indian business process outsourcing organizations" (published in IIMB Management Review) investigated the direct effect of organizational stress on organizational citizenship behaviors (OCBs). Findings reflect that there is a negative relationship and significantly high association between organizational stress and OCB. Stress predicts OCB negatively that explains 9% of variance in OCBs. Demographic variables were found to be insignificantly correlated with the overall OCB in this study.

The obtained data was analyzed by using Pearson r, t-test and regression analysis. The results of correlation analysis indicate that role overload was positively correlated with OCB directed toward individuals (OCB-I), although no significant relationship between role overload and OCB directed towards organization (OCB-O) was found. The results of hierarchal regression analyses clearly indicate that role overload is significantly positively predicts OCB-I.

Organizational Stress, Job Satisfaction and Organizational Commitment

Fethi Calisir, Cigdem A. Gumussoy and Ibrahim Iskin (2011) "Factors affecting intention to quit among IT professionals in Turkey" (published in Personnel Review) revealed that intention to quit one’s job is explained by job satisfaction and organizational commitment. Besides, role ambiguity and job stress exert negative indirect effects on the intention to quit one’s job. Additionally, organizational commitment is strongly explained by job satisfaction, and job satisfaction is predicted by role ambiguity and job stress.

4. NEED OF THE STUDY

Work in today's IT industry is characterized by increasing complexity, rapid change, and increasingly competitive business environments (Cascio, 1998). In such a turbulent environment, the IT organizations are replacing their HR Practices with the Strategic Human Resource Practices because being a knowledge-based industry; a high intellectual capital lends competitive advantage to a firm.

Organizational citizenship behavior is a prominent element of Strategic Human Resource Management. It has a significant impact on the productivity and efficiency of the organization, so it should be considered an efficient way of improving organizational profitability and reducing costs through, for example, lowering rates of absenteeism and turnover. At the same time it increases employee performance and wellbeing, as cooperative workers are more productive, and OCB enhances the social environment in the workplace. Under the recent developments in IT Industry, employee turnover has been viewed as an important organizational problem. Its importance lies in the fact that there are numerous negative consequences in organizations if the rate of employee
turnover is high. The direct and indirect costs associated with turnover, not only in terms of recruitment and training, but also in terms of work disruption and demoralization of remaining employees are very significant and expensive.

To face the prominent HR challenge in today’s IT industry i.e. reducing employee turnover rate and absenteeism so as to organizational performance and effectiveness could be increase, there is need to find out certain measures or practices that would help to face that challenge. There are various factors that affect employees’ intent to quit; one of them is organizational citizenship behavior. So we can suggest that one practice or measure out of many to reduce turnover or absenteeism for an organization is to develop organizational citizenship behavior among their employees.

This study and its findings will be significant and beneficial to the HR practitioners who look behind the all HR issues in IT industry such as recruitment of world-class workforce and their retention, compensation and career planning, performance appraisal, training and development, employee turnover and absenteeism. This study will reveal the factors or a model that describe the construct of Organizational Citizenship Behavior.

5. OBJECTIVES OF THE STUDY

The proposed study will be based on the following objectives:

- To measure the Organizational Citizenship Behavior exhibited by the IT Professionals in India.
- To study the relationships between Organizational Citizenship Behavior and its antecedents Organizational Commitment, Job Satisfaction, and Occupational Role Stress.
- To suggest effective strategies that shall help to enhance the Organizational Citizenship Behavior among the IT professionals.
6. RESEARCH MODEL AND HYPOTHESES

The proposed study shall be carried out based upon a conceptual research model (Refer Figure 5). The proposed research model is an integrated model which depicts linkages between Organizational Commitment, Job Satisfaction, Occupational Role Stress, and Organizational Citizenship Behavior.

![Figure 5: conceptual research model for the proposed study indicating hypotheses](image)

The variables which are identified as antecedents of Organizational Citizenship Behavior from the literature are explained below:

**Organizational Commitment and Organizational Citizenship Behavior**

Positive attitudes are expected to result in positive behaviors. One of the job attitudes is Organizational Commitment; committed people towards the organization are thought to be more likely to remain with the organization and dedicated towards the organizational goals attainment. Podsakoff et al (2000) found a significant positive relationship between Organizational Commitment and Organizational Citizenship Behavior. Mogotsi et al (2011) tested a model depicting the positive impact of organizational commitment on organizational citizenship behavior and they found significant influence of organizational commitment on organizational citizenship behavior. Therefore it is hypothesized:

**H1:** There is a significant positive impact of Organizational Commitment on Organizational Citizenship Behavior.
**Job Satisfaction and Organizational Citizenship Behavior**

Job satisfaction refers to a collection of feelings toward the job. Satisfied employees would seem more likely to talk positively about the organization, help others, and go beyond the normal expectations in their job (Robbins, 2005). Kim (2006) proposes that employees who enjoy a higher level of job satisfaction will exhibit a higher level of OCB. Mohammad (2011) found job satisfaction as the predictor of organizational citizenship behavior. Therefore it is hypothesized:

\[ H_2: \text{There is a significant positive impact of Job Satisfaction on Organizational Citizenship Behavior.} \]

**Occupational Role Stress and Organizational Citizenship Behavior**

Health and Safety Executive (2004) defines organizational stress in terms of the adverse reactions of people to excessive pressures or other types of demand placed on them. Role stressors strain the behaviors at workplace that's why various research studies linked stress with organizational citizenship behavior. Jain & Cooper (2012) suggested that stress reduces involvement in acts of OCB; lower level of stress will exhibit a higher level of OCB. Therefore it is hypothesized:

\[ H_3: \text{There is a significant negative impact of occupational role stress on Organizational Citizenship Behavior.} \]

**Occupational Role Stress and Job Satisfaction**

Robbins (2005) said that stress can cause dissatisfaction, and job-related stress can cause job-related dissatisfaction. The result of Jackson and Schuler's (1985) meta-analysis showed that high levels of role stressors were associated with low levels of job satisfaction. Ahsan et al (2009) investigates the relationship between job satisfaction as dependent variable and job stress as independent variable and found a significant variance in job satisfaction explained by job stress. Therefore it is hypothesized:

\[ H_4: \text{There is a significant negative impact of occupational role stress on Job Satisfaction.} \]

**Occupational Role Stress and Organizational Commitment**

It is expected that employees who experience high level of stress tend not to be committed to their organization. Khatibi et al (2009) found significant negative relationship between job stress and organizational commitment and suggested that an
increase in job stress resulted in a decrease in organizational commitment. Therefore it is hypothesized:

| H5: There is a significant negative impact of occupational role stress on Organizational Commitment. |

Job Satisfaction and Organizational Commitment

The main difference between organizational commitment and job satisfaction is that while organizational commitment can be defined as the emotional responses which an employee has towards his organization; job satisfaction is the responses that an employee has towards any job. According to Meyer et al. (2002), job satisfaction is a determinative of organizational commitment. Satisfaction and positive feeling toward one's job further promotes feeling of commitment toward the organization. Komal nagar (2012) found that Job Satisfaction is a significant predictor of organizational commitment. Calisir et al (2011) showed that organizational commitment is strongly explained by job satisfaction. Therefore it is hypothesized:

| H6: There is a significant positive impact of Job Satisfaction on Organizational Commitment. |

7. RESEARCH METHODOLOGY

The proposed research shall be accomplished in two different phases to attain the objectives of the study. The first phase of the proposed study shall begin with the Exploratory Research aimed at identifying the variables which affect the Organizational Citizenship Behavior (OCB) as a whole through the review of valuable literature. The second phase of research shall comprise of carrying out a Descriptive as well as Analytical Research to analyze and describe OCB level and various aspects related to it. To make the research more reliable and valid the data from both the sources i.e. Primary as well as Secondary will be used. The primary data will be collected from the selected study sample using the appropriate sampling techniques followed by the analysis of the results through the use of appropriate statistical tools to draw logical inferences and valid conclusions of the research. The proposed research shall be carried out in two phases research process given under as:
7.1 Scope of the study

The study will be restricted only to the IT Professionals of selected IT companies in India: Tata Consultancy Services Ltd., Infosys Ltd., & Wipro Ltd.

7.2 Sample Design

The sample design for the proposed research is described below:

7.2.1 Sampling Process

STAGE I- At first stage leading three IT Companies (based on their head-counts and revenue for fiscal year 2011-12; source: NASSCOM) are selected i.e. Tata Consultancy Services Ltd., Infosys Ltd., and Wipro Ltd.

STAGE II- As Bangalore has been ranked fourth as a global hub of technological innovation, behind San Francisco and Austin of the US, and Taipei in Taiwan (Source: VERGE A NASSCOM Regional Newsletter- SOUTH, June 2012). So the Silicon Valley (Bangalore, India) has been selected to draw out samples for this study.

STAGE III- At the third stage, offices of the selected IT Companies located in Bangalore will be selected as a stratum through lottery method.

STAGE IV- At this stage the sample size will be divided into equal proportion to select the respondents from selected IT Companies.
Table 2- Sampling Process

<table>
<thead>
<tr>
<th>STAGES</th>
<th>TASK</th>
<th>SAMPLING TECHNIQUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Selection of the IT Companies</td>
<td>Judgmental Sampling</td>
</tr>
<tr>
<td>II</td>
<td>Selection of the location</td>
<td>Judgmental Sampling</td>
</tr>
<tr>
<td>III</td>
<td>Selection of the offices</td>
<td>Stratified Random Sampling</td>
</tr>
<tr>
<td>IV</td>
<td>Selection of the respondents</td>
<td>Proportionate Allocation Scheme</td>
</tr>
</tbody>
</table>

7.2.2 Sample Size

The proposed study shall include three leading IT Companies: Tata Consultancy Services Ltd., Infosys Ltd., & Wipro Ltd. whose total number of employees is beyond 50,000 hence to determine an appropriate sample size for study, the Cochran’s formula is used which is as follows:

\[
Sample Size = \frac{z^2 \times p \times (1-p)}{C^2}
\]

\(z = z\)-value (e.g., 1.96 for a 95 percent confidence level)

\(p = \) Percentage of population picking a choice, expressed as decimal

\(C = \) Confidence interval (.05)

\[
Sample Size = \frac{1.96^2 \times 0.5 \times (1-0.5)}{.05^2} = 384
\]

A sample size of 384 is suggested by above formula given by Cochran, making it the true representative of the population, therefore, a sample size of 400 will be taken for conducting this study successfully.

7.2.3 Selection of Respondents

The respondents for collecting the primary data will be chosen from the executive levels i.e. Senior, Middle & Associates of the selected IT Companies. The sample size of 400 (134+133+133) is divided into three parts i.e. 134 (due to odd figure of the number of selected companies), 133 and 133 which will be the number of respondents from the selected IT companies TCS Ltd., Infosys Ltd., & Wipro Ltd. respectively. The respondents
will be selected from each executive level of the company i.e. 6%, 29% and 65% from Senior, Middle level and Associates respectively. (Refer table3)

Table 3: Selection of Respondents

<table>
<thead>
<tr>
<th>Executive Level</th>
<th>TCS Ltd. (N=134)</th>
<th>Infosys Ltd. (N=133)</th>
<th>Wipro Ltd. (N=133)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senior Level (6%)</td>
<td>8</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Middle Level (29%)</td>
<td>39</td>
<td>39</td>
<td>39</td>
</tr>
<tr>
<td>Associates (65%)</td>
<td>87</td>
<td>86</td>
<td>86</td>
</tr>
</tbody>
</table>

7.2.4 Justification of sample

The respondents from selected IT Companies (TCS Ltd., Infosys Ltd. & Wipro Ltd.) will be selected on the basis of the average of percentage of total employees working at various levels such as: Senior level, Middle level, & Associates. The selection of respondents from each level of management in the selected company will be such as 6% from Senior level, 29% Middle level & 65% Associates, derived on the basis of the average of employees working at different levels in the selected companies as follows:

Table 4: Selection of number of respondents for the proposed research

<table>
<thead>
<tr>
<th>Executive Level</th>
<th>TCS Ltd.</th>
<th>Infosys Ltd.</th>
<th>Wipro Ltd.</th>
<th>Averages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senior Level</td>
<td>4%</td>
<td>12%</td>
<td>2%</td>
<td>6%</td>
</tr>
<tr>
<td>Middle Level</td>
<td>41%</td>
<td>34%</td>
<td>13%</td>
<td>29%</td>
</tr>
<tr>
<td>Associates</td>
<td>55%</td>
<td>54%</td>
<td>85%</td>
<td>65%</td>
</tr>
</tbody>
</table>

The above table explains the averages of percentage of total employees working at Senior level, Middle level and Associates separately for each selected IT Company, they are: TCS Ltd., Infosys Ltd. & Wipro Ltd. For the calculation of average, data shown in breakup of workforce by category of selected IT Companies (Refer Figure 1, 2 & 3) is used.
7.3 Data Collection

The proposed study will be based on both primary and secondary data for the purpose of obtaining the determined objectives of study.

7.3.1 Sources of data:

- **Primary Data:** To fulfill the objectives and to test the hypotheses, primary data will be collected by administering a Structured Questionnaire over the selected study sample. Before preparing a questionnaire few target respondents will be interviewed, that will be unstructured in nature. Thereafter, a structured questionnaire will be prepared, which will be exposed to a pilot test to check its reliability. Any amendment which would be felt necessary will be made in final questionnaire before administering it to all 400 respondents i.e. IT Professionals working in selected IT companies (TCS Ltd., Infosys Ltd., and Wipro Ltd.)

- **Secondary Data:** Journals, magazines, books, reports and websites will constitute the source of secondary data.

7.4 Statistical Tools

Appropriate statistical tools will be used to accomplish the objectives of the proposed study such as: Descriptive Statistics, Correlation, Multiple regression analysis and ANNOVA etc.

**PROPOSED CHAPTERISATION**

The structure of the proposed study will be as follows:

Chapter 1: Introduction

Chapter 2: Review of Literature

Chapter 3: Research Methodology

Chapter 4: Profile of Selected IT Organizations

Chapter 5: Analysis & Results

Chapter 6: Conclusion and Suggestions

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SHIPRA AGRAWAL
RESEARCH SCHOLAR
DEPARTMENT OF MANAGEMENT
FACULTY OF SOCIAL SCIENCES

PROF. SHIV KUMAR SHARMA
(SUPERVISOR)
DEPARTMENT OF MANAGEMENT
FACULTY OF SOCIAL SCIENCES

PROF. SANJEEV SWAMI
HEAD & DEAN
DEPARTMENT OF MANAGEMENT
FACULTY OF SOCIAL SCIENCES