Chapter 3

Methodology
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The purpose of this chapter is to present the methodology used in developing the instruments to measure PC and OCB, and testing the hypothetical model. This chapter also covers the conceptual and operational framework for instrument development, the hypothetical model, research objectives, hypotheses, research design including sampling framework, data collection and statistical design for testing the hypotheses.

3.1 OVERALL RESEARCH OBJECTIVES

1. To develop the psychological contract and organization citizenship instruments.
2. To test the hypothetical model linking PC, OCB, OE, and demographic variables under consideration using the developed instruments.

In order to pursue the objectives the study was divided into stages. The first stage will deal with the instrument development part of the research and the second stage will cover empirical validation of the hypothetical model (of relationship between PC, OCB, and OE) using a series of hypotheses.

Developing a measurement instrument and testing for validity of the instrument requires detailed attention to the selection of variables, developing appropriate statements to measure the variables, and pretesting of the instrument for reliability and validity. The PC and OCB instrument here was developed following a similar rigorous and robust procedure. The steps and methods used in developing the instruments are explained in the following sections. The hypothetical model provided in the later part of this chapter, illustrates the relationship between demographic variables, PC, OCB, and OE.

3.2 STAGE 1: INSTRUMENT DEVELOPMENT

The current section explains the process and methods followed during the instrument development. The instruments were developed after thorough conceptual analysis (elaborated in the previous chapter) and validity analysis (explained in Chapter 4).
3.2.1 Concept Analysis

Based on an extensive review of research literature (chapter 2), the following steps were used to identify and determine the empirical variables, for the development of instrument: (a) identifying and defining the characteristics of variables attributed to the measurement of PC and OCB; (b) verifying the theoretical validity of these variables in relation to measurement of PC and OCB; (c) identifying the sub-components of the PC and OCB; and (d) defining the empirical components (dimensions) of PC and OCB. Apart from a detailed conceptual analysis to identify the theoretical as well as empirical variables, the researcher also used qualitative methods such as focus group discussion, to identify empirical variables for the purpose of instrument development.

3.2.2 Focus Group Discussion

Focus group discussions were conducted to identify the empirical indicators for the purpose of development of the construct. The focus group was a semi-structured group session, moderated by researcher with the purpose of collecting the data on the various parameters of the construct. A total of seven focus group discussions were conducted with eight participants in each focus group discussion. Four focus group discussions were held with non-managerial participants representing employee perspective to PC. Three focus group discussions were held with senior managers, representing employer’s perspective of PC. Managers / staff from ten organizations and participants of an executive MBA programme in a business school were requested to participate in the focus group discussion. In addition, invitations were sent to individual professionals to participate in the focus group discussion, as volunteers. Only the business school and one organization granted the permission to conduct FGD. Participants in the FGD (sample groups) are divided into two sets: employee group and manager (employer) group. The first set consisted of 32 non-managerial staff (Females 10; Males 17) with average age of 27; from corporate office (15) (from consulting, finance, marketing, and supply chain disciplines) and from factories (12). The second set consisted of 24 managerial staff (Females 6 and Males 18) with average age of 36; representing corporate office (16) (from consulting, finance,
marketing, and supply chain domains) and from factories (8). The focus group discussion report is presented in Annexure-I. In the focus group discussion eight contents of employee psychological contract and six contents of employer PC were verified mentioned in the coming section. The relevance of employer psychological contract was strengthened. Evidence for managerial level employees as true agents of employer was found out. Further, in context to OCB, it was found out that traditionally used contents of OCB are exhibited by employees due to: a) the normative pressure in the organization, b) OCB contents are part of the formal system of the organization, and c) employee’s predisposition to display OCB.

Based on the conceptual analysis and FGD, the PC construct was defined as employee and employer expectations of each other. Similarly the concept of OCB was redefined to not only represent the voluntary dimension (a well-established construct to measure OCB), but also two new dimensions namely normative and rule bounded OCB. Measures of organizational effectiveness were also narrowed down to few empirical variables. The details of these variables in provided later in the chapter.

3.2.3 Operationalisation of Definitions

3.2.3(a) Psychological Contract

Conceptually PC in the current study is referred as mutual and implicit relationship between employee and employer (or agents of employer). Psychological contract is a multidimensional construct, which is subjective, perceptual, ever changing, and is based on individual beliefs, expectations and obligations.

A. Contents of Employee Psychological Contract

i. Training And Development: An employee’s expectation that the employer shall provide management support, facilitate in acquiring and enhancing his/her skills and competencies, expectations that enhanced competencies shall help in performing assigned tasks better, and expectation that the opportunities to enhance skills would provide better career/promotional avenues both within and outside the organization.
ii. **Social Climate:** An employee’s expectation that the employer shall provide a healthy, cooperative, and friendly relationship with seniors, subordinates, and colleagues. The expectation that dynamics between people in organization would be on the basis of comradeship and culture of excellence rather than dominated by cut throat competition, power, and political dynamics.

iii. **Job Content:** An employee’s expectation that the employer shall provide challenging, respectful, interesting, meaningful duties and responsibilities, expectation that the job would entail sufficient decision making authority, expectation that nature of job would provide opportunities to exhibit skill set and competencies, expectation that job profile/duties is not abruptly changed, and expectation that employee would be given sufficient time to adapt to changed working conditions.

iv. **Compensation:** An employee’s expectation that the employer will provide internally and externally competitive compensation and performance would be sole criterion for level of compensation.

v. **Freedom To Quit:** An employee’s expectation from employer that they are allowed to quit from the current organization at their volition rather than being constrained by contractual obligation.

vi. **Respect and Dignity:** An employee’s expectation from employer that he/she will be treated with dignity, respect, equality, and employer not discriminating the employee on the basis of gender, caste, religion, and region (etc.).

vii. **Reward and Recognition:** An employee’s expectation from employer that his/her (employee’s) contribution to the organization is adequately acknowledged and rewarded (monetary and non-monetary).

viii. **Work-Life Balance:** An employee’s expectation that the employer shall provide due cognizance/due diligence to employee’s personal lives; expectation that employer shall provide sufficient flexibility to allow freedom to engage in personal commitment.
B. Contents of Employer Psychological Contract

i. Performance and Promotability: An employer’s expectation that the employee shall perform their jobs to best of their abilities and competencies in a focused manner; expectation that employee would be focused on achieving targets and goals of the organization; expectation that employee would constantly strive to improve their skills in order to perform their current responsibilities and assumed greater responsibilities; expectation that they would optimize the opportunities given by organization to improve their skills.

ii. Adaptability: An employer’s expectation that the employee shall quickly adapt to perform in constantly changing jobs and workplace situations; expectations that employee would exhibit great deal of team spirit and maturity in dealing with situations arising from power and political dynamics around them.

iii. Compliance: An employer’s expectation that the employee shall conform to the norms, rules, regulation, policies, norms, processes, and procedures of the organization; expectation that they understand resource limitation in terms of compensation and degree of power and discretion given to them; expectation that authority discretion to different employees of different departments may not be equal.

iv. Work Life Balance Conflict: An employer’s expectation that, the employee shall not indulge in activities beyond the call of duty in the name of WLB. Employee is expected not to perform deficiently in face of personal needs/situations.

v. Stability: An employer’s expectation that, the employee shall stay for a certain period of time in order to ensure stability of job performance; and expectations that employee shall not look out for job while working in the organization.

vi. Respect: An employer’s expectation that, the employee shall treat superiors and colleagues with dignity and respect irrespective of circumstances; expectation that they would not discriminate and humiliate colleagues and subordinates for any background factors (e.g., gender, caste, region etc.).
3.2.3(b) Organization Citizenship Behavior

OCB refers to behavior beyond the call of the duty displayed out of pre-disposition (voluntariness) and normative pressure (normative OCB) within the organization, to benefit people and organization. The contents chosen to measure voluntary OCB and normative OCB after concept analysis and focus group discussion are: creativity, benchmarking, loyalty, result orientation, quality consciousness, reliability, and ethics

i. **Voluntary OCB**: An employee’s discretionary behavior beyond the call of duty, not explicitly recognized by organization, and it benefit the people and organization.

ii. **Normative OCB**: An employee’s behavior beyond the call of duty, displayed due to peer pressure, strong norms of the organization, not explicitly recognized by organization, and collectively benefits the people and organization.

3.2.3(c) Organization Effectiveness

An effective organization has significant high gross profit, cash profit margin, and return on capital employees in comparison to the peer organization (organizations falling in the same sales turnover range).

3.2.4 Employee Expectations and Employee Met Expectations

Conventionally PC was seen as employee’s expectations from the prospective employer, measured invariably at the pre-arrival stage. However it is equally critical to measure the employment experience of an employee, in the form of met expectations. This is one of the additional facets of this research. In most studies on PC, the employer’s own expectations from the employee is neither recognized nor measured. In this study, an attempt has been made to capture even the employer’s expectations and met expectations (pre and post-employment experience). In order to capture these components, the design of the instrument has been such that the respondent are required to mark the pre-arrival expectations and post-joining experiences (extent to which the expectations were met) on same constructs in one form. The instrument used five point interval scale (Likert Scale) to capture the pre-arrival expectations and met expectations, from the employees with respect to their
Chapter 3: Methodology

The instrument requested the participants to rate their expectations before joining the organization on various contents of the PC. Content measurement approach was used to measure employee expectations. The contents are: training and development, social climate, job content, compensation, rewards and recognition, work-life-balance, respect and dignity, and freedom to quit. The instrument begins with clear instructions to the respondent, in this case the employees. It was phrased as “Each one of us, before joining an organization have certain expectations from the organization/employer. Following statements pertain to your expectations from the current employer. Kindly indicate (tick mark) the degree of some of your expectations before joining (PART I) and actual experiences (of met/unmet expectations) after joining (PART II) on the following items”. The rating scale for measuring employee PC is presented in Table 3.1

<table>
<thead>
<tr>
<th>Expectations prior to joining (Part I)</th>
<th>Met Expectations after joining (Part II)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Not at all expected</td>
<td>Not at all Met</td>
</tr>
<tr>
<td>2 Expected but to least extent</td>
<td>Met but to least extent</td>
</tr>
<tr>
<td>3 Moderately Expected</td>
<td>Moderately Met</td>
</tr>
<tr>
<td>4 Clearly Expected</td>
<td>Clearly Met</td>
</tr>
<tr>
<td>5 Expected to a great extent</td>
<td>Met to a great extent</td>
</tr>
</tbody>
</table>

3.2.5 Employer Expectations and Employer Expectations

The instrument was designed in such a manner that the respondents (in this case employer) were required to mark the pre-hiring expectations and post hiring experience from the employees, who were hired. The pre-arrival and post –arrival expectations and experience were measured using same components in one single form. The instrument used five point interval scales (Likert scale) to capture the employer expectations from the employee. The employer expectations were captured on the contents like promotion and promotability, adaptability, compliance, work-life balance conflict, stability, and respect for colleagues. The instrument begins with a
clear instruction: “Before a new employee is hired, the company (you as the management representative of the company) would have certain expectations from the prospective employees. Following statements pertain to your expectations from your employees. Kindly indicate (tick mark) the degree of some of your expectations from the prospective employees before hiring (Part I) and the extent to which the company expectations have been met or unmet (Part II)”. The rating scale for employer PC is presented in Table 3.2.

**Table 3.2: Rating Scale for Employer Psychological Contract**

<table>
<thead>
<tr>
<th>Expectations prior to hiring</th>
<th>Met expectations post hiring</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Not at all expected</td>
</tr>
<tr>
<td>2</td>
<td>Expected but to least extent</td>
</tr>
<tr>
<td>3</td>
<td>Moderately Expected</td>
</tr>
<tr>
<td>4</td>
<td>Clearly Expected</td>
</tr>
<tr>
<td>5</td>
<td>Expected to a great extent</td>
</tr>
</tbody>
</table>

**3.2.6 Organization Citizenship Behavior (OCB)**

Conventionally OCB is measured using only a construct called Voluntary OCB (V-OCB) (meaning employees display citizenship behavior due to self-driven motives). However, based on extensive conceptual analysis and based on FGD, it was felt that V-OCB alone is not sufficient to capture the OCB components. Therefore two additional OCB constructs were identified and used in this instrument. These are termed as (a) Normative OCB (N-OCB); and (b) Rule Bounded OCB (R-OCB). The instrument uses the five point interval scale (Likert scale) to capture OCB of employees. The instrument requested the participants to rate their OCB on the given items. The instrument gave clear instruction to the respondents and was phrased as:

“The questionnaire consists of a number of statements. Read each statement carefully and decide to what extent each statement applies to you in your current organization. Do not leave any item unanswered or skip any question. The five rating scale is used (1= strongly disagree, 2= disagree, 3=neither agree nor disagree, 4= agree, and 5=strongly agree)”. 
3.2.7  Pilot Testing

A pilot test of the instrument was conducted on one tenth (n=200) of the proposed sample of the study. The survey for the pilot test was undertaken in the presence of the researcher, in order to address any queries faced by the participants, if instructions are clear, if participants find anything difficult/ inappropriate/objectionable, to observe any inconvenience in the process of filling the questionnaire, to calculate the average time in filling the questionnaire, to get informal feedback from the participants, and also identify any scope for further modifications. The data gathered during the pilot study has been excluded from further analysis (from the major study).

3.2.8  Factor Analysis

Exploratory factor analysis method was used to extract factors of PC and OCB. The method was used since majority of the contents of PC and OCB are new in this instrument. Prior to factor analysis, descriptive analysis, correlation analysis, Kaiser Meyer Olkin (KMO), Bartlett’s Test, anti-image correlation, and communalities were used to ensure that the data is factorable. The above mentioned methods were used to ensure that the correlation matrix is not an identity matrix (i.e. there is no correlation between the items), that the sample size is sufficiently relative to the number of items in the scale, and that the correlation between individual items is strong enough to suggest that the correlation matrix is factorable.

3.2.8. a. Principal Axis Factoring

Principal axis factoring method was used with the assumption that the variance in the given variables can be explained by underlying common factors and by variance unique to the variable.

3.2.9. b. Rotating the Factors

The current research uses the varimax rotation for factor analysis. The varimax rotation was used as it maximizes the variance of the loading within the factors and maximizes the difference between the high and low loadings on a particular factor.
The advantage of varimax is that the explained variances among the factors do not overlap and hence are independent of each other.

The instrument thus developed to measure PC and OCB was subjected to validation using larger sample respondents, and the process and outcome of this validation is provided in detail in chapter 4. In the following paragraphs, methodology followed for testing the Hypothetical model (along with a number of hypotheses) is discussed.

3.3 STAGE II: EMPIRICAL VALIDATION OF HYPOTHETICAL MODEL

Based on in-depth conceptual analysis, the researcher was able to develop a theoretical model that illustrates possible relationships between psychological contract, organizational citizenship, behavior, and organizational effectiveness. The relationship between PC, OCB, and OE has been defined using a number of hypotheses. A hypothetical model suggesting the nature of relationship between PC, OCB, OE, and demographic and occupational variables has been illustrated using a hypothetical model. In the following paragraphs, the methodology used to test the model as well as the hypotheses, using the validated instrument (of PC and OCB) is described. In the hypothetical model, Employee PC is treated as independent variable to OCB. And PC and OCB are treated as independent variables to organizational effectiveness. As the independent variable PC is further subdivided in to employee expectations, employee met expectations, employee PC fulfillment, employer expectations, employer met expectations, and employer PC fulfillment. Similarly OCB was further subdivided in to voluntary OCB and normative OCB. Further, the model also includes gender, age, marital status, education, experience, personality as independent variables to employee PC and OCB. The model attempts to test the hypotheses using correlation, ANOVA, and hierarchical regression analysis. The research model and the hypothetical model (relationships) are presented in figure 3.1 and figure 3.2 respectively.
Figure 3.1: Proposed Research Model of the Research

Figure 3.2: Proposed Hypothetical Model of the Research

Note: Hypothesis No. 19 to 32 deals with firm level analysis and not included in this model
3.3.1 Hypotheses

A. Relationship between PC, OCB, and OE

While there are several theoretical definitions to the concepts of PC, OCB, and OE (as discussed in detail in Chapter 2), for the purpose of current research these concepts are already operationally defined.

Psychological Contact (PC) is an implicit agreement which binds an employer and employee. It is the mutual exchange of promises between the employer and employee during hiring process and the actual exchange between the employee and employer which takes the form of expectations. These expectations are influenced by prior socialization and shared beliefs of society, organization, and professional groups about the employment relationship. Employee and employer revise their expectations from each other with continuous interaction. Employee expect employer to provide career development, rewards and recognition, social climate, work life balance, compensation, freedom to quit (FTQ), job content, and respect and dignity. On similar lines employer expect the employee to fulfill the following expectations: performance, promotability, compliance, adherence to norms, and flexibility and adaptability.

Organizational Citizenship Behavior (OCB) is the behavior displayed by the employees beyond the prescribed boundaries of formal job role, systems and procedures in order to benefit the organization. It is largely influenced by employees’ predisposition or self voluntariness and norms of the organization.

In the absence of any comprehensive definition of OE, the current research measures the OE by categorizing the organizations on the basis of sales turnover, gross profit, cash profit margin, and return on capital employed. The organizations under study are clustered in to categories of high on OE and low on OE on the basis of the above financial indicators. The concept of PC and OCB is important in the organization behavior because both the variables influence the organizational outcome.

Broadly the current research study assumes that PC leads to OCB and breach of PC is negatively related to OCB (detailed review in Chapter 2). It is also assumed that breach of
transactional PC has relatively smaller effect on OCB (Zhao, Wayne, Glibkowski, and Bravo, 2007). In some studies the PC was not related to either of OCB dimensions but perceived employer inducement and perceived employer obligations are positively related to civic virtue and loyalty respectively (Coyle-Shapiro and Conway, 2005). OCB is considered to be very critical for organization performance and OE. Breach of PC may lead to deviant behavior among employees at work place. The review indicates that various researchers have used terminologies like organizational effectiveness and organizational performance, interchangeably to indicate the same concept. The current research also assumes similar approach to analyzing the OE variable under the broader notion of organization effectiveness and organizational performance. The display of OCB is believed to increase the OE and organization performance (Coyle-Shapiro, 2002; Coyle-Shapiro and Kessler, 2000; Robinson, 1996; Robinson and Morrison, 1995). The review in context of OCB suggest that OCB increases the effectiveness of the organization through managing the interdependencies among members of a work unit (Netemeyer et al., 1997), enabling an organization to allocate scarce resources (Borman and Motowidlo, 1993; Organ, 1988), and improving the abilities of employees to perform their jobs (MacKenzie et al., 1991; Organ, 1988). Further, there is a body of research which indicates both direct and indirect relationship of PC and OCB with individual performance; individual effectiveness, job performance, and task performance of an employee (see Chapter 2). Therefore, the current research make an inference that reduced individual effectiveness in aggregate will lead to reduction in OE. Similarly, PC breach leads to overall low employee performance that brings down organizational performance (Lester et al., 2002). However, there is limited research linking PC and OCB with financial indicators of the OE as per the researcher’s best of knowledge.

There is significant research linking PC and OCB; OCB to OE and subjective indicators of OE to PC like job satisfaction, organization commitment (etc.) (see Chapter 2). However, these studies were undertaken in order to establish one to one relationship and not comprehensively linking all three. On the basis of review and conceptual arguments the current research proposes that there will be significant variation in the PC and OCB in organizations that are financially low on OE and high on OE. The following hypotheses attempt to define the relationship between various
components of PC, OCB, OE, and individual demographic and occupational factors. These hypotheses are:

**Hypothesis 1:** There will be a significant difference in the employee PC of high on OE and low on OE organization.

Sub Hypothesis 1(a): There will be a significant difference in the contents of employee PC of high on OE and low on OE organization.

**Hypothesis 2:** There will be a significant difference in the employer PC of high on OE and low on OE organization.

Sub Hypothesis 2(a): There will be a significant difference in the contents of employer PC of high on OE and low on OE organization.

**Hypothesis 3:** There will be a significant difference in the OCB (V-OCB and N-OCB) of high on OE and low on OE organization.

**Hypothesis 4:** There will be a positive relationship between employee PC and OCB (V-OCB and N-OCB).

Sub Hypothesis 4(a): There will be a relationship between contents of employee PC and OCB.

**Hypothesis 5:** The employee met expectations and PC non-fulfillment will predict V-OCB.

Sub Hypothesis 5(a): The contents of employee met expectations will predict V-OCB.

Sub Hypothesis 5(b): The contents of employee PC non-fulfillment will predict V-OCB.

**Hypothesis 6:** The employee met expectations and PC non-fulfillment will predict N-OCB.

Sub Hypothesis 6(a): The contents of employee met expectations will predict N-OCB.

Sub Hypothesis 6(b): The contents of employee PC non-fulfillment will predict N-OCB.

**Hypothesis 7:** Employee met expectations, employee PC non-fulfillment, V-OCB, and N-OCB will predict OE.

**Hypothesis 8:** Employer expectations and employer PC non-fulfillment will predict OE.
B. **Relationship between Demographic Attributes (of employees), PC and OCB**

i. **Gender, Psychological Contract, and Organization Citizenship Behavior**

Gender significantly influences the PC (Tallman and Bruning, 2008; Lemire and Rouillard, 2005). Women have different expectations from the employer. Women at workplace report problems like sexual harassment, sexual discrimination, stereotyping, less growth opportunities, low pay, and glass ceiling. Men do not experience such problems at workplace and therefore, hold different perspective of PC fulfillment. Women prefer a healthy social environment, support, and adequate resource at workplace (Konrad et al., 2000). Further, women hold stronger attitudes about the mutual obligations than men (Tallman and Bruning, 2008). Moreover, employer also perceives female employees less committed, especially when they are in child bearing stage. Past studies suggest no strong relationship between OCB and gender, but there are plausible explanations in the research supporting the relationship between OCB and gender (see Chapter 2). The current research differs from the previous research as components of both PC and OCB vary from the previous research. Moreover, the study attempt to study whether male and female employees hold different expectations. The hypotheses statement is:

**Hypothesis 9:** There will be a significant difference in the employee PC and OCB (V-OCB and N-OCB) of male and female employees.

Sub Hypothesis 9(a): There will be a significant difference in the contents of employee PC of male and female employees.

ii. **Age, Psychological Contract, and Organization Citizenship Behavior**

Older employees and younger employee view workplace in different way. At the age of 20-34 years employees are establishing themselves and at the age of 35- 55 years they develop a strong sense of self and perspective about life and work. The difference in PC and OCB among younger and older employees is attributed to the abilities of younger employees to adapt to the changing environment, rigid behavior of older employees, ability to deal with difficult social relationship. It is argued that older employees display more of OCB. The relationship is greater when the interactive effect of age and experience is studied (see Chapter 2). Age alters the self-
concepts, emotional intensity, social interaction patterns, altruistic attitudes and behaviors, life goals, and coping strategies (see Chapter 2) and thus age influences the development of employee expectations. Moreover, the reaction to PC breach is different among different age groups of employees. It is believed that emotional reaction over time become less intensive. Further, over the life span employees learn to control their emotions. Though, there are no conclusive studies stating the effect of age on expectations, met expectations, and OCB, but studies link age, PC, and OCB on the basis of inference drawn from the behavior displayed by younger and older people in general. The current study aim to study the difference between age group (20-30 years and 31-40 years) as the data set for the age group 41-50 years, 51-60 years, and 61-70 years is limited to make any generalization. On the basis on these arguments the current study states the hypotheses:

**Hypothesis 10:** There will be a significant difference in the employee PC and OCB (V-OCB and N-OCB) of younger age group (20-30 years old employees) and older age group (31-40 years old employees).

Sub Hypothesis 10(a): There will be a significant difference in the contents of employee PC and OCB of younger age group (20-30 years old employees) and older age group (31-40 years old employees).

### iii. Marital Status, Psychological Contract, and Organization Citizenship Behavior

Marital status is personal factor which influence the PC. Married employees hold different expectations from the employer. The interactive effect of marital status and number of dependent further suggest a strong relationship with PC. Considering the limited research, the current research explores the relationship between marital status, PC, and OCB. The research proposes the hypothesis:

**Hypothesis 11:** There will be a significant difference in the employee PC and OCB (V-OCB and N-OCB) of unmarried and married employees.

Sub Hypothesis 11(a): There will be a significant difference in the contents of employee PC of unmarried and married employees.
iv. *Education, Psychological Contract, and Organization Citizenship Behavior*

The research on education, PC, and OCB is too limited to make any conclusive statements. Though, there are studies which do explain variance in PC, OCB among skilled/unskilled employees, occupational groups, and knowledge workers. The researcher argues that education level of employees is related to skilled/unskilled employees, occupational groups, and knowledge employees but not same. Knowledge workers are workers who possess special knowledge. Knowledge workers display of innovation and creativity is determined by PC with employer (Flood, Turner, Ramamoorthy, and Pearson, 2001). It is argued that high skilled employees are more loyal to their profession then to organization, indicative of shift in PC. However, research also suggests that investment in employee development will lead to the formation of relational contract. The skilled employees desire training and development, extending this logic to the current research. It would be interesting to study if education status of an employee influence PC and OCB in the same manner as in case of skilled employees and knowledge workers. The research excludes the MPhil/PhD category and proposes the hypotheses:

**Hypothesis 12:** There will be a significant difference in the employee PC of graduate and post graduate employees.

Sub Hypothesis 12(a): There will be a significant difference in the contents of employee PC of graduates and post graduates employees.

v. *Experience, Psychological Contract and Organization Citizenship Behavior*

The experience of an employee is believed to influence PC and OCB. Though, there is no research or limited study, if any which examine the independent effect of experience on PC and OCB. By experience we mean the time spent by an employee in performing his/her job. There is very high correlation between age and work experience but they are conceptually different. There is difference in aging and work experience. Aging refers to the psychological and physiological changes over the life span while work experience refers to time spent/years spent in performing a job. Experienced employees develop realistic expectations over time. Further, with experience employees develop more clarity about work and workplace over time.
Therefore, the effect of unrealistic job preview by employer reduces. Moreover, experienced employees perceive that their contract is less replicable. This perception influences the expectations of the employees. The current research proposes the hypotheses:

**Hypothesis 13:** There will be a significant difference in the employee PC and OCB (V-OCB and N-OCB) of employees of different experience group (1-5 Years and 6-10 Years).

Sub Hypothesis 13(a): There will be a significant difference in the contents of employee PC of employees of different experience group (1-5 Years and 6-10 Years).

**vi. Personality, Psychological Contract, and Organization Citizenship Behavior**

PC is the perceptual construct and determined by individual predisposition, cognitive mechanism, and temperament. In the current research personality is studied using the big five personality traits. Personality influence the way people perceive the things around. Neuroticism and extraversion predict negative work affect and job satisfaction. Agreeable employees are less likely to report breach of PC. Further, they prefer relational PC over transactional PC. In context to OCB agreeable employees are altruistic, cooperative, and compliant (see Chapter 2). People high on openness to experience are high on divergent thinking and detail oriented with ability to predict future accurately. Therefore, it is argued that employee high on openness will report PC beach due to their divergent thinking and detail orientation. Extrovert people are expressive, gregarious, assertive, and excitement-seeking. Extroverts employees prefer to make long term relationship with employees. Further, they are high on information seeking using their social skills. Therefore, the tendency to experience PCB would be high among extroverts. There are no studies to confirm or reject the relationship between extroversion and OCB. Contrary to this introverts are shy, have limited social skills, feel uncomfortable in social interactions, and withdraw from many interpersonal situations. There are no clear findings indicative of relationship between introverts, PC, and OCB. Conscientious people are planned, hard working, achievement-oriented, persevering, and have capacity to understand the PC in detail. The review argues that conscientious people would report low PC breach because of
the mentioned characteristics. The current research states that such people might report greater PC as the awareness of being conscientious will raise the expectations from the employee. Employees high on neuroticism experience relatively greater PC breach because they perceive unfair treatment due to low self esteem. They are fearful, angry, and depressed. Overall, it is believed that personality influence PC and breach. However, there is no clarity over the relationship between big five personality and PC and OCB. The study attempts to explore the relationship between PC and OCB and proposes the hypotheses:

**Hypothesis 14: Big Five personality traits will predict employee PC.**

Sub Hypothesis 14 (a): Big Five personality traits will predict contents of employee expectations.

Sub Hypothesis 14 (b): Big Five personality traits will predict contents of employee met expectations.

Sub Hypothesis 14 (c): Big Five personality traits will predict contents of employee PC un-fulfillment.

**Hypothesis 15: Big Five personality traits will predict V-OCB.**

**Hypothesis 16: Big Five personality traits will predict N-OCB.**

**vii. ‘Balanced Psychological Contract’ and Organization Effectiveness**

In the current research, the term ‘balanced PC’ refers to balance between expectations, met expectations, and PC fulfillment of both employee and employer on relatable constructs. This is measured by comparing the employee and employer score. A balanced PC is a relationship where an employee and employer expectations are complementary to each other, there is an equal contribution by both the employee and employer. However, the term balanced PC is used in different context and yet similar by Denise Rousseau. She defines balanced PC as an open ended employment relationship determined by success of the firm. Employee and employer contribute highly to the firm and employees are rewarded as per the performance/success of the organization (Rousseau, 2000). The balanced PC by Rousseau includes the higher exchange from both the parties. The researcher is assuming the higher contribution
from the parties can be assumed to be equal contribution. Albeit, the focus of the current definition is on equal contribution which not necessary has to be higher and open ended employment arrangement. On the basis of the given arguments following hypothesis are formulated:

**Hypothesis 17:** There will be a significant difference in the employee and employer PC of high on OE.

**Hypothesis 18:** There will be a significant difference in the employee and employer PC of low on OE organization.

viii. **Sector Wise Analysis**

**Hypothesis 19:** There will be a significant difference in employee PC and OCB of high on OE and low on OE of pharmaceutical organizations.

Sub Hypothesis 19 (a): There will be a significant difference in the contents employee PC of high on OE and low on pharmaceutical organizations.

**Hypothesis 20:** There will be a significant difference in employer PC of high on OE and low on OE pharmaceutical organizations.

Sub Hypothesis 20(a): There will be a significant difference in the contents of employer PC of high on OE and low on pharmaceutical organizations.

**Hypothesis 21:** There will be a significant difference in employee PC and OCB of high on OE and low on OE of FMCG organizations.

Sub Hypothesis 21 (a): There will be a significant difference in the contents employee PC of high on OE and low on FMCG organizations.

**Hypothesis 22:** There will be a significant difference in the employee and employer PC of low on OE FMCG organization.

Sub Hypothesis 22(a): There will be a significant difference in the contents of employer PC of high on OE and low on OE pharmaceutical organizations.
ix. **Firm level Analysis**

Hypothesis number 23 to 42 will deal with firm level analysis to further support the hypothetical model and ensure that there is no extrapolation of the results due to the data from a particular firm.

**Cluster 1**

Hypothesis 23: There will be a significant difference in the employee PC and OCB of firm 1 (high on OE) and firm 2 (low on OE) of cluster 1.

Sub Hypothesis 23(a): There will be a significant difference in the contents of the employee PC of firm 1 (high on OE) and firm 2 (low on OE) of cluster 1.

Hypothesis 24: There will be a significant difference in the employer PC of firm 1 (high on OE) and firm 2 (low on OE) of cluster 1.

Sub Hypothesis 24(a): There will be a significant difference in the contents of the employer PC of firm 1 (high on OE) and firm 2 (low on OE) of cluster 1.

**Cluster 2**

Hypothesis 25: There will be a significant difference in the employee PC and OCB of firm 3 (high on OE) and firm 4 (low on OE) of cluster 2.

Sub Hypothesis 25(a): There will be no significant difference in the contents of the employee PC of firm 3 (high on OE) and firm 4 (low on OE) of cluster 2.

Hypothesis 26: There will be a significant difference in the employer PC of firm 3 (high on OE) and firm 4 (low on OE) of cluster 2.

Sub Hypothesis 26(a): There will be a significant difference in the contents of the employer PC of firm 3 (high on OE) and firm 4 (low on OE) of cluster 2.

**Cluster 3**

Hypothesis 27: There will be a significant difference in the employee PC and OCB of firm 5 (high on OE) and firm 6 (low on OE) of cluster 3.

Sub Hypothesis 27(a): There will be a significant difference in the contents of the employee PC of firm 5 (high on OE) and firm 6 (low on OE) of cluster 3.
Hypothesis 28: There will be a significant difference in the employer PC of firm 5 (high on OE) and firm 6 (low on OE) of cluster 3.

Sub Hypothesis 28(a): There will be a significant difference in the contents of the employer PC of firm 5 (high on OE) and firm 6 (low on OE) of cluster 3.

Cluster 4

Hypothesis 29: There will be a significant difference in the employee PC and OCB of firm 7 (high on OE) and firm 8 (low on OE) of cluster 4.

Sub Hypothesis 29(a): There will be a significant difference in the contents of the employee PC of firm 7 (high on OE) and firm 8 (low on OE) of cluster 4.

Hypothesis 30: There will be a significant difference in the employer PC of firm 7 (high on OE) and firm 8 (low on OE) of cluster 4.

Sub Hypothesis 30(a): There will be a significant difference in the contents of the employer PC of firm 7 (high on OE) and firm 8 (low on OE) of cluster 4.

Cluster 5

Hypothesis 31: There will be a significant difference in the employee PC and OCB of firm 9 (high on OE) and firm 10 (low on OE) of cluster 5.

Sub Hypothesis 31(a): There will be a significant difference in the contents of the employee PC of firm 9 (high on OE) and firm 10 (low on OE) of cluster 5.

Hypothesis 32: There will be a significant difference in the employer PC of firm 9 (high on OE) and firm 10 (low on OE) of cluster 5.

Sub Hypothesis 32(a): There will be a significant difference in the contents of the employer PC of firm 9 (high on OE) and firm 10 (low on OE) of cluster 5.

3.3.2 Research Design

Hypotheses testing stage of this research study followed a cross-sectional design. The cross sectional design is chosen considering the purpose, objective, variables of the
research, and the need to compare different population groups at a single point in time. The organizations were divided into blocks on the basis of the sales turnover, gross profit, cash profit margin, and return on capital employed. The OE matrix is given in the figure 3.1.

### 3.3.3 Sampling Framework

#### 3.3.3.1 Organization Effectiveness Matrix

Following steps were taken to design the sampling framework.

i. The pharmaceutical and FMCG organizations listed on senses and nifty were identified.

ii. The range was defined on the basis of the sales turnover values of all the organization (Pharmaceutical and FMCG separately).

iii. The organizations falling into the same sales turnover ranges were plotted.

iv. Two organization were selected under each sales turnover range (cluster)

v. All the ten organization were classified into 5 clusters (2 organization each, with same sales turnover range)

vi. The range of the gross profit, cash profit margin, and return on capital employed was created for the organization falling in the same sales turnover range (or same cluster).

vii. Within same cluster, the organization falling into the high range of the gross profit, cash profit margin, and return on capital employed was labeled as high on effectiveness and organization falling into the low range of the gross profit, cash profit margin, and return on capital employed was labeled as low on effectiveness.

The OE matrix is given in figure 3.3.
3.3.3.2 Why Pharmaceutical and FMCG Sector

The rationale behind choosing pharmaceutical and FMCG sector was the relative stability of these sectors. The frequent instability of other sectors could have influenced the overall results. The PC is considered to be sensitive to the fluctuation in the larger markets. Some sectors are greatly influenced by fluctuation in market and economy. Since, we cannot control the stability and instability aspect of an organization to measure PC; the research uses the relatively stable pharmaceutical and FMCG sector.

3.3.3.3 Data Collection Procedure

The current research targeted organization listed on Sensex and NIFTY. The listed organizations were chosen because listed organizations provide more reliable financial figures relative to the non-listed organization. 27 Pharmaceuticals and 31 FMCG organizations were selected randomly from the list of organizations derived from Sensex and NIFTY on the basis of OE matrix developed from the sales turnover and gross profit figures of the organizations. All the sampled organizations were contacted and requested to participate in the doctoral research. Further, HR heads...
were mailed the proposal for participation, cover letter, brief of the research, and sample copy of the questionnaire. All the organizations were assured of confidentiality of the data. Prior to invitation to the organization, all the organization were categorized into OE matrix on the basis sales turnover and gross profit. 18 companies completely refused the proposal due to company policies and the permission to collect the data from the employees outside the organization of respective organization was also denied. The data from 3 organizations was excluded due limited data relative to the employee strength of respective organizations. Total 10 organizations agreed to participate. Further, 4 organization agreed to participate only if researcher agree to share final report of the data collected from their respective organization. Organizations argued that the report will facilitate in the development and modification of HR policies and procedures.

Data from total 10 organizations is considered in the the current research, 4 organization from FMCG sector, and 6 organization from pharmaceutical sector agreed to participate. In FMCG sector 2 organizations facilitated and supported data collection with the help of HR department in the organization and 2 organizations from FMCG sector refused to support the data collection within the organization but provided contact details of the employees and permitted the researcher to contact employees of their organization through other resources like databanks, personal reference, and professional networking sites. Similarly, in 2 pharmaceutical organization supported and facilitated the entire data collection process and 2 organization agreed to collect data from limited number of employees and permitted to collect more data from the employees outside the organization. The primary data was collected through personal administration, online through mails, and follow up through telephone. In 2 organization data was collected physically collected with the support of internal HR of respective organization. Organizational reports for all the organizations were sent to all those organizations who allowed collecting data within their organization premise as expression of gratitude.

3.3.3.5 Respondents

The sample consists of total 1837 employees. The response rate of the participants is given in table 3.3.
Table 3.3: Response Rate of the Survey

<table>
<thead>
<tr>
<th>Eligible Companies/Sample</th>
<th>Completed Questionnaire</th>
<th>Total Completed Questionnaire/Companies Participated</th>
<th>Response Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Self Administered</td>
<td>Email</td>
<td>Telephone Interview</td>
</tr>
<tr>
<td></td>
<td>58</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>3700</td>
<td>552</td>
<td>1120</td>
</tr>
</tbody>
</table>

3.3.3.6 Respondent Profile

The sample size covers 1689 male participants and 148 female participants. The minimum age of participant is 20 and the maximum is 64. The mean of the age of employees is 33.37 years. Further, there are 499 employees to represent the 10 employer PC for their respective organization. The sample profile is given in table 3.4

3.3.4 Measures

a. Psychological Contract: The method of the instrument development is presented above in stage I section. The factor analysis and the validation report of the instruments given in chapter 4.

b. Organization Citizenship Behavior: The method of the instrument development is presented above in stage I section. The factor analysis and the validation report of the instruments given in chapter 4.

c. Personality: NEO five factor inventory is used to measures personality (Costa and McCare, 1992). The test measure big five personality traits (dimensions): a) Agreeableness ( $\alpha$ =0.79), b) Conscientiousness ( $\alpha$ =0.82), c) Extroversion ( $\alpha$=0.86), d) Neuroticism ( $\alpha$ =0.89), e) Openness to experience ($\alpha$ =0.81). The test consists of total 60 items and 12 items measure each personality domain.
Table 3.4: Sample Characteristics of the Participants (N=1837)

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>Age (In Year)</th>
<th>MS</th>
<th>N</th>
<th>Education</th>
<th>N</th>
<th>Experience (In Years)</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>91.94%</td>
<td>20-30</td>
<td>46.43%</td>
<td>N</td>
<td>Graduates</td>
<td>45.24%</td>
<td>0-1</td>
<td>5.99%</td>
</tr>
<tr>
<td>Female</td>
<td>8.06%</td>
<td>31-40</td>
<td>36.15%</td>
<td>Married</td>
<td>Post Graduates</td>
<td>51.28%</td>
<td>1-5</td>
<td>45.68%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>41-50</td>
<td>12.57%</td>
<td></td>
<td>M.Phil./Ph.D.</td>
<td>3.48%</td>
<td>6-10</td>
<td>22.49%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>51-60</td>
<td>4.63%</td>
<td></td>
<td></td>
<td></td>
<td>11-15</td>
<td>12.15%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>61-65</td>
<td>0.22%</td>
<td></td>
<td></td>
<td></td>
<td>16-20</td>
<td>7.09%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>21-25</td>
<td>4.15%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>26-30</td>
<td>1.48%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Above 30</td>
<td>0.77%</td>
</tr>
</tbody>
</table>

3.4 LIMITATIONS

Like most of the social science studies, this study also is limited in its scope of generalization. To dilute the effect of disadvantage of cross-sectional design a big sample size is chosen. The sample size has low percentage of female employees, employees with doctoral degree, and employees above 16 years of experience.

3.5 SUMMARY

The researcher in the present chapter has detailed out the blueprint of the research strategy. The research is based on the cross-sectional design. To draw the relevant sample size, disproportionate stratified random sampling method is used. The chapter explains the instrument model for PC, OCB, and hypothetical model to test the hypotheses. It highlights the rationale for developing instrument, the instrument development procedure, and the psychometrics of the instrument. The research has major 38 hypotheses for examination. It also lists down the various methods to test the hypotheses. The next chapter will provide the statistical report on the tool development and validation.