CHAPTER 4
Theoretical Framework and Research Methodology
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In the previous chapter, training culture in travel agencies has been discussed which covered the annual demand of trained manpower, different departments of travel agencies, skills needed as a travel agent and different types of training being conducted in travel agencies. Finally the chapter ends with common challenges and pitfalls along the way of the industry.

The present chapter is the window to the whole study as it gives a sketch of the whole idea behind the proposed research work. Objectives are set and hypotheses are framed to cover the gaps identified in the second chapter which enabled researcher to entail the research design for the proposed study. This chapter begins with the introduction of research methodology followed by objectives, hypotheses development, and conceptual framework of the study. Research boundaries have also been intensely discussed. The chapter reports the research design of this study, which describes questionnaire design, data sampling, data-collection, and data analysis pattern. Following this research design, an extensive discussion of the survey scale with associated instruments is presented. The reliability and validity of these instruments are also reported. This chapter explains in detail the scale development process adopted for Training Culture Scale.

4.1 Introduction

Research methodology is a way to ascertain the result of a given problem on a specific matter or problem that is also referred to as research problem. In methodology, researcher uses different criteria for solving the given research problem. In research methodology, researcher always endeavors to probe the given question systematically and to ascertain all the answers till conclusion. If research does not work systematically on problem, there would be less possibility to find out the final results. For finding or exploring research questions, a researcher faces a lot of problem that can be effectively resolved with using correct research methodology. Research methodology process includes a number of activities to be performed. These are arranged in proper sequence of timing for conducting research. One activity after another is performed to complete the research work.
This research is exploratory-cum-causal in nature and its objective is to build upon the understanding of the concept of training culture, and to examine and study its dimensions and to probe its impact on certain job behavioural variables on employees working in LSTAs at Delhi. This study adopted descriptive vs. analytical approach to evaluate and analyze the problems of the study and to collect data and information that enables researcher to reach to the results and suggests the suitable recommendations. Thus this chapter makes an endeavor to elaborate the research methodology for the proposed study alongwith the theoretical framework of the study in detail.

4.2 Objectives of the Study

The aim of the study is;

- To assess the concept of training culture (TC) in large-sized travel agencies by crystallizing a model containing constructs, mediators and outcome of TC.

Drawing on this, following specific objectives have been formulated;

1. To study Training Culture (TC) and related constructs.
2. To evolve a measure of Training Culture (TC) for travel agencies in India.
3. To assess the influence of training culture on job performance, organizational commitment and turnover intention of employees of travel agencies under study.
4. To explore the mediating role of job performance and organizational commitment in the relationship between training culture and turnover intention.
5. To analyze the perception of employees on training culture across age, gender, academic qualification and work experience.
6. To propose measures for instilling TC in travel agencies.

4.3 Conceptual Framework of the Study

The conceptual framework provides a clear concept of the areas in which meaningful relationships are likely to exist. The conceptual framework describes and explains the concepts to be used in the study, their relationships with each other, and how they are to be measured (Gratton & Jones, 2004), and then examines the validity
of the theory (Sekeran, 2003). Thus, the conceptual framework works in conjunction with research goal to justify the study. This conceptual framework consists of theories, their derived hypotheses, and operationally defined variables and concepts (Cargan, 2007).

The framework for this research has been determined by considering the functions of the objectives as well as the review of literature, and before the decision of how to collect the data for carrying out the research. It describes the linkages of Training Culture (TC) by the inclusion of Training Design, Trainee Characteristics and Supervisor Support for Training as its sub-constructs, with Job Performance, Organizational Commitment and Turnover Intention directly as shown in Conceptual Model-I. The proposed model also focuses on the mediating role of job performance and organizational commitment in the relationship between training culture and turnover intention as presented in Conceptual Model-II. Nevertheless, the impact of demographic variables; age, gender, academic qualification and work experience, on training culture has also been covered.

Figure 4.1: Proposed Conceptual Model –I
4.4 Hypotheses Development

The present study examines the relationship between training culture and job performance, organizational commitment and turnover intention. The hypotheses for the present study have been crystallized based on relationships explored among variables under considerations. This section covers the hypotheses development along with the reasoning for their formulation.

4.4.1 Relationship between Training Culture and Job Performance

Training is necessitated due to rapid advances in technology, developing core competencies, steering downsizing and re-engineering and covering gaps in formal education which all being issues of immediate nature fall in line with manager’s domain (Niazi, 2011). Indeed, employee training has been well identified as a tool
that managers can utilize to help employees to bridge the gap between their present
level of performance and their desired level of performance (Bianca, n.d.). In general,
training is considered to have a positive effect on productivity by enhancing the skills
and competencies of employees (Eliophotou, 2013). Jagero, Komba and Mlingi
(2012) conducted a research with a motive to find out the relationship between on-
the-job training and employee performance. It was found out that performance to a
big extent depends on the training that employees received. It is stated with certainty
that there is a big relationship between on-the-job training and employee performance.
On-the-job training programs really positively influence on employee performance.
Amin, Saeed, Lodhi, Mizna, Simra, Iqbal and Tehreem (2013) showed that training
benefits have a positive and strong correlation with job performance. Muzaffar,
Salamat and Ali (2012) argued that it is crucial to inspire the employees by means of
satisfying the space in between skills necessary and the owned or operated by means
of staff through delivering applicable training to increase the employee’s
performance.

As the discussion unravels, training has become recognized as a key player in
the development of an organization and as a mean to ameliorate employees’
performance in the organization. Through the years many research studies have been
conducted to determine the relationship between training and performance of
employees. Furthermore, existing literature (Skerlavaj, Stemberger, Mojca, Skrinjar,
& Dimovsk, 2007; Mwesigwa, 2010; Appiah, 2010; Tanveer, Shaukat, Zeeshan, Alvi
& Munir, 2011; Afaq, Yusoff, Khan, Azam, & Thukiman, 2011; Farooq & Khan,
2011; Jagero, Komba & Mlingi, 2012; Mahmood, 2012; Sultana, Irum, Ahmed, and
Mehmood, 2012; Amin, Saeed, Lodhi, Mizna., Simra., Iqbal, & Tehreem, 2013;
Renganayaki, 2013; Iqbal, Ahmad & Javaid, 2014; Sabir, Akhtar, Bukhari, Nasir, &
Ahmed, 2014) implies a positive relationship between training and employees’
performance.

Keeping in view the above studies, following null hypotheses have been
framed;

\[ H_0 \]: Training Culture has no significant influence on job performance of the
employees working in LSTAs under study.
Sub Hypotheses:

H₀₁.₁: Training Design has no significant influence on job performance of the employees working in LSTAs under study.

H₀₁.₂: Supervisor Support has no significant influence on job performance of the employees working in LSTAs under study.

H₀₁.₃: Trainee Characteristics have no significant influence on job performance of the employees working in LSTAs under study.

4.4.2 Relationship between Training Culture and Organizational Commitment

Organizational commitment has been the subject of continued research interest for several decades because of its relationship with individual and organizational performance and organizational effectiveness. The relevancy of training culture also plays a critical role in establishing employees’ commitment towards its organization. Workers are more likely to become committed to an organization if they believe that the organization is focused on them (Eisenberger, Huntington, Hutchison & Sowa, 1986). Every employee enters into training programs with specific expectations and needs. But when the results of training programs do not meet the expectations and needs of participants, it may lead to lower commitment, negative attitude change, and an increase in turnover of the employees (Brum, 2007). Ahmad and Bakar (2003) cogently observed that the employees who recognize the benefits from training will tend to be more committed and so be more willing to participate in an organization’s training activities. Bartlett (2001) demonstrated that employee attitudes toward training, such as perceived access to training, social support for training, motivation to learn, and perceived benefits of training were highly associated with organizational commitment.

Keeping in view the above studies, following null hypotheses have been framed;

**H02**: Training Culture has no significant influence on organizational commitment of the employees working in LSTAs under study.

**Sub Hypotheses**;

- **H02.1**: Training Design has no significant influence on organizational commitment of the employees working in LSTAs under study.
- **H02.2**: Supervisor Support has no significant influence on organizational commitment of the employees working in LSTAs under study.
- **H02.3**: Trainee Characteristics have no significant influence on organizational commitment of the employees working in LSTAs under study.

### 4.4.3 Relationship between Training Culture and Turnover Intention

There is a significant body of scholarly literature relating to the impact of training culture on organizational outcomes. The following sections will attempt to add to this literature by examining the effect that training culture has on turnover intention. In the connection of social exchange theory, employees who get adequate and significant training opportunities in organizations might be more reluctant to leave their organization (Shore, Tetrick, Lynch & Barksdale, 2006). In this manner, if employees see that they have more training opportunities, then it may bring about decreasing their turnover intention (Emami, Moradi, Idrus & Almutairi, 2012).

Turnover intention is among one of those factors that are highly influenced by the quality and number of training programs conducted in an organization. Benson (2006) has examined participation in three types of development activities among salaried employees. Analyses of survey and archival data show that on-the-job training was positively related to organizational commitment and negatively related to intention to turnover. Participation in tuition-reimbursement, which provides more general or marketable skills, was positively related to intention to turnover. However, intention to turnover was reduced after earning a degree through tuition-reimbursement if employees were subsequently promoted.

Therefore the existing literature on training and turnover (Egan, Yang & Bartlett, 2004; Mohamad & Aizzat, 2006; Connie & David, 2009; Mehmood, 2012;
Mapelu & Jumah, 2013) suggested a significant relationship between training and turnover intention. Keeping in view the above studies, following null hypotheses are framed:

**H**<sub>0.3</sub>: Training Culture has significant influence on Turnover Intention of the employees working in LSTAs under study.

**Sub Hypotheses:**

**H**<sub>0.3.1</sub>: Training Design has no significant influence on Turnover Intention of the employees working in LSTAs under study.

**H**<sub>0.3.2</sub>: Supervisor Support has no significant influence on Turnover Intention of the employees working in LSTAs under study.

**H**<sub>0.3.3</sub>: Trainee Characteristics have no significant influence on Turnover Intention of the employees working in LSTAs under study.

### 4.4.4 Mediation Hypotheses

#### 4.4.4.1 JP as a Mediator in the relationship between TC-TI

Relationship between training and job performance has a long-standing interest among researchers and managers. Time to time researchers (Chiou, Lee & Purnomo, 2010; Farooq & Khan, 2011; Afaq, Yusoff, Khan, Azam, & Thukiman, 2011; Jagero, Komba & Mlingi, 2012; Mahmood, 2012; Singh & Mohanta, 2012; Amin, Saeed, Lodhi, Mizna., Simra., Iqbal, & Tehreem, 2013; Ameeq & Hanif, 2013; Iqbal, Ahmad & Javaid, 2014) have attempted to probe their relationship with different aspects. Appiah (2010) in a research identified the impact that training has on employee performance. The data revealed that employees were able to identify specific improvements to their development as a result of the training they have obtained. Farooq and Khan (2011) in a study aimed to elaborate the impact of Training and Feedback on increasing the performance of employees. Study found that training not only individually strengthen the employees’ performance but also they collectively work for creating the environment which is compatible with all level of employees, and they also continually nourish their work attitude and behaviour.

Through the years many research studies (Jackofsky, 1984; Jackofsky, Ferris & Breckenridge, 1986; Karatepe, Uludag, Menevis, Hadzimehmedagic & Baddar,
2006; Jones, 2007; Zimmerman & Darnold 2009) have been conducted to determine the relationship between performance of employees and their turnover intention. Zimmerman and Darnold (2009) made an attempt to estimate the strength of the relationship between job performance and intentions to quit (ITQ) and found that the work performance and turnover intention are negatively correlated. Similarly Hui, Wong and Tjosvold (2007) in a study found that turnover intention correlated negatively with individual job performance. In contrast to these researchers, some studies have highlighted positive relationship between job performance and turnover intention. Likewise, in a study by Jackofsky, Ferris and Breckenridge (1986) performance found to directly affect the motivation of employees to search other jobs, and it was also reported that high-performance employees leave the job more easily than low-performance employees do. Similarly Karatepe, Uludag, Menevis, Hadzimehmedagic and Baddar (August, 2006) found that job satisfaction is negatively associated with intention to leave, while performance is not. Employees with high performance will have more choices of employment opportunities and move more easily reported Jackofsky (1984).

Keeping in view the above studies, following null hypotheses have been framed;

**H₀⁴:** Job Performance of employees does not mediate the relationship between Training Culture and Turnover Intention of the employees working in LSTAs under study.

**Sub Hypotheses;**

**H₀⁴.1:** Job Performance of employees does not mediate the relationship between Training Design and Turnover Intention of the employees working in LSTAs under study.

**H₀⁴.2:** Job Performance of employees does not mediate the relationship between Supervisor Support and Turnover Intention of the employees working in LSTAs under study.

**H₀⁴.3:** Job Performance of employees does not mediate the relationship between Trainee Characteristics and Turnover Intention of the employees working in LSTAs under study.
4.4.4.2 OC as a Mediator in the relationship between TC-TI

The relationship between organizational commitment and turnover intention has been supported in several additional studies (Tett & Meyer, 1993; Adenguga, Adenuga & Ayodele, 2013). Numerous studies have continually shown mediating effect of OC in the relationship between TC and TI (Anvari & Amin, 2011; Juhdi, Pa’wan, Milah and Hansaram, 2013). Access to training is highly associated with OC (Bartlett, 2001). The greater the commitment levels of the employee, the less the likelihood that the individual will leave the organization (Martin & Roodt, n.d; Yang, 2008) and a committed employee is one that will remain with the organization (Brum, 2007).

Juhdi, Pa’wan, Milah and Hansaram (2013) examined the impact of HR practices on organizational commitment and turnover intention. HR practices were measured using employees’ perception on career management, person-job fit, compensation and performance appraisal. All the four HR practices were found significantly related to organizational commitment and negatively related to turnover intention. This study also demonstrated that organizational commitment is found as a partial mediator between HR practices and turnover intention. Anvari and Amin (2011) determined the relationships between strategic training practices, turnover intention, and organizational commitment. The survey results demonstrated that organizational commitment is a partial mediator between strategic training practices and turnover intention. Verhees (2012) describes the direct and indirect effects between training hours and employees’ turnover intentions, and also the role of organizational commitment. Results shows that the types of organizational commitment have also no significant effect on turnover intentions and the mediation effect of organizational commitment is also not confirmed. Gardner, Moynihan and Wright (2007) provide insights into the mediating linkages between HR systems and organizational outcomes. The HR practices are classified into three viz. skill enhancing, motivation enhancing, and empowerment enhancing practices. They hypothesized that collective affective commitment will fully mediate the relationship between motivation and empowerment enhancing practices and aggregate turnover and partially mediate the relationship between skill enhancing HR practices and aggregate turnover. Finding showed that lacking an association between skill enhancing practices and commitment, there can be no mediation.
Keeping in view the above studies, following null hypotheses are framed;

**H$_{05}$**: Organizational Commitment of employees does not mediate in the relationship between Training Culture and Turnover Intention of the employees working in LSTAs under study.

**Sub Hypotheses**;

- **H$_{05.1}$**: Organizational Commitment of employees does not mediate the relationship between Training Design and Turnover Intention of the employees working in LSTAs under study.
- **H$_{05.2}$**: Organizational Commitment of employees does not mediate the relationship between Supervisor Support and Turnover Intention of the employees working in LSTAs under study.
- **H$_{05.3}$**: Organizational Commitment of employees does not mediate the relationship between Trainee Characteristics and Turnover Intention of the employees working in LSTAs under study.

**4.4.5 Hypotheses Related to Demographic**

Factor such as position/seniority put differences in a need to be satisfied in accordance with the position that they had. Another factor, gender, put women prefer to adjust to the authority, while men are said to be more aggressive in creating hope and success (Robbins, 1996). Various demographic variables such as gender, age, education, and organizational tenure have been also examined by researchers (Karatepe, Uludag, Menevis, Hadzimehmedagic & Baddar, 2006). Hypotheses related to demographic information of the respondents are as follows;

**H$_{06}$**: Significant differences do not exist among employees based on gender with respect to Training Culture in LSTAs under study.

**Sub Hypotheses**

- **H$_{06.1}$**: Significant differences do not exist among employees based on gender with respect to Training Design in LSTAs under study.
- **H$_{06.2}$**: Significant differences do not exist among employees based on gender with respect to Supervisor Support in LSTAs under study.
- **H$_{06.3}$**: Significant differences do not exist among employees based on gender with respect to Trainee Characteristics in LSTAs under study.
H₀₇: Significant differences do not exist among employees based on age with respect to Training Culture in LSTAs under study.

Sub Hypotheses

H₀₇.₁: Significant differences do not exist among employees based on age with respect to Training Design in LSTAs under study.

H₀₇.₂: Significant differences do not exist among employees based on age with respect to Supervisor Support in LSTAs under study.

H₀₇.₃: Significant differences do not exist among employees based on age with respect to Trainee Characteristics in LSTAs under study.

H₀₈: Significant differences do not exist among employees based on academic qualification with respect to Training Culture in LSTAs under study.

Sub Hypotheses

H₀₈.₁: Significant differences do not exist among employees based on academic qualification with respect to Training Design in LSTAs under study.

H₀₈.₂: Significant differences do not exist among employees based on academic qualification with respect to Supervisor Support in LSTAs under study.

H₀₈.₃: Significant differences do not exist among employees based on academic qualification with respect to Trainee Characteristics in LSTAs under study.

H₀₉: Significant differences do not exist among employees based on work experience with respect to Training Culture in LSTAs under study.

Sub Hypotheses

H₀₉.₁: Significant differences do not exist among employees based on work experience with respect to Training Design in LSTAs under study.

H₀₉.₂: Significant differences do not exist among employees based on work experience with respect to Supervisor Support in LSTAs under study.

H₀₉.₃: Significant differences do not exist among employees based on work experience with respect to Trainee Characteristics in LSTAs under study.
4.5 Research Boundaries

The present study deals with the assessment of training culture pertaining to employees in selected Travel Agencies. The present study is conducted in LSTAs at Delhi. This study is not a comparative analysis within or outside the Travel Agencies but an analysis of the influence of training culture in all selected LSTAs. Its significance may further be high in years to come. The research boundaries of this study may be further divided as follows:-

4.5.1 Geographical Boundaries

Delhi is the location of the study and travel agencies within Delhi have been studied for the purpose of research. New Delhi being the capital of India has an amazing mix of modernization and carefully preserved antiquity. It is old, culturally rich, one of the fastest growing cities in India, and contains main activities of tourism in India. Being a metropolitan and cosmopolitan city, it has a more central role in organizing and managing tourists and hence makes this study more representative and reliable. The travel agencies vary in size, operations, turnover, services and management hence, data have been collected from 8 well know LSTAs at Delhi as the industry is in growing phase and other travel agencies are still not large-sized and well organized in their business and management functions.

4.5.2 Subject Boundaries

The scope of this study is limited to the subject of HRD. This research concentrated on training culture; it studied the concept of training culture, antecedents of training culture, factors on which training culture does have influence on the employees working in LSTAs at Delhi.

4.6 Research Design of the Study

Research needs a design or a structure before data collection or analysis. Research design is a research plan, which can be used as an architectural blueprint of the research study (Clarke & Dawson, 1998; Babbie & Mouton, 2006), and is used to guide the method and procedures of data collection and analysis (Burn & Bush, 1995; Churchill, 1996; Zikmund, 2003). The function of research design is to ensure that the
evidence obtained enables researchers to answer the initial question as unambiguously as possible (De Vaus, 2004).

This study adopted a mixed method approach to build a broader picture by adding depth and insights to the study. According to Johnson, Burke, Onwuegbuzie and Turner (2007) mixed methods research is the type of research in which a researcher combines elements of qualitative and quantitative research approaches (e.g., use of qualitative and quantitative viewpoints, data collection, analysis, inference techniques) for the purposes of breadth and depth of understanding and corroboration. The literature review in Chapter Two provides the theoretical and empirical base for this study. Being an empirical study, this research is completely based on survey method collected by the researcher through well designed, structured and comprehensive questionnaire. A survey is a data-gathering and analysis approach in which respondents answer questions or respond to the statements that are developed in advance (Scheuren, 2004; Kasunic, 2005). Information is collected by means of standardized procedures so that every individual is asked the same questions in more or less the same way. The survey’s intent is not to describe the particular individuals who are part of the sample but to obtain a composite profile of the population. In addition, there is no simple rule for sample size that can be used for all surveys. Much depends on the professional and financial resources available.

4.6.1 Details of Study

There are many frameworks of research designs and they can be classified into three traditional categories: exploratory, descriptive and causal (Aaker, Kumar & George 2000; Burns & Bush 2002; Hair, Bush, & Ortinau, 2003; Churchill & Iacobucci 2004). This research is exploratory-cum-causal in design. Exploratory researches are conducted to develop initial insights and to provide direction for any further research needed (Parasuraman 1991; Malhotra 2008). The exploratory character of social science research alludes to the very area of what can be identified, depicted, and clarified (Reiter, 2013). Exploratory research is employed when the theme or issue is new and when information is hard to gather. Exploratory research is flexible and qualitative (Aaker, Kumar & George, 2000; Burns & Bush, 2002). It is regularly used to produce formal hypothesis (Shields & Tajalli, 2006). In this study
instead of examining the substantive content of words and categories, researcher gears towards holding interpretative model of Training Culture and thus avoid the pitfalls of reification that lure at almost every corner of inquiry into a meaningfully structured reality. Researcher offers new constructs, models, and theories that allowed analyzing training culture phenomenon in a new and fruitful way. This study is likewise causal in nature, as testing the hypothesized model with the objective of eliciting cause and effect relationships among variables is a declared goal of this study.

4.6.2 Research Setting

The study collects data from the employees about training culture, job performance, organizational commitment and turnover intention towards their organizations. The research setting for this study is LSTAs at Delhi. Although there is no official or universally accepted definition for LSTA, but as per Negi (1997) a LSTA has separate divisions for operation and marketing, each reporting to division head vice-president and there may be 50 agents in addition to four or six finance and account executives. One of the main characteristics of LSTA is that it has separate HR department with training and development experts, and there are separate departmental heads having single area of responsibility said Sharma (2006). This study is limited by cost and the accessibility of the database; therefore the size of the population used for survey is limited to LSTA operating at Delhi.

4.6.3 Sample and Sampling Method

Sampling is the mathematical means used to draw a representative number of elements from a larger population. Sampling is done whenever data are gathered from a fraction of a population being studied, allowing the researcher to make probable inferences about the larger universe without studying every member of that universe. The objective of most sampling procedure is to produce a group that is representative of the population in order to be able to make accurate generalizations about all of the population (Cargan, 2007). It is more manageable and cost effective to work with sample than a pool of all the cases (Zikmund, 2003). Sampling reduces cost, reduces labour requirement and quickly gather vital information. A sampling element is the unit of analysis, or case, in a population. In this study, the sampling unit is the LSTAs which are operating from Delhi.
In the present study, the criteria for selecting the travel agencies are;

1. The travel agencies should be operating from Delhi.
2. The travel agencies should be top most players of travel and trade business,
3. The travel agencies should be listed in IATA.
4. The travel agencies should have separate departments for different activities.
5. The travel agencies generally perform both the functions of tour operations and retail travel.

On the basis of the criteria set above 12 travel agencies were selected for data collection, but 4 companies refused to participate in the research survey. Therefore the final data have been collected from 8 travel agencies;

- Thomas Cook
- Yatra.Com
- Make My Trip
- Cox and Kings
- Kouni Destination
- Orbit Tour and Travels
- FCM Travel Solutions India Pvt. Ltd
- STIC Travels Pvt. Ltd

For the purpose of this study sample has to be taken since it is not possible to cover all the employees working in these travel agencies. Therefore, sample of employees working in LSTAs has been chosen for the study, so that it can do justice with the research work done. Hence a survey was employed in this study for collection of data. In the words of Scheuren (2004), “a survey is defined as a method for gathering information from a sample of individuals. Subsequently, this study sought to estimate the situation that are not directly evident, for which a survey is deemed to be an suitable way to apprehended the findings from a large population at one time (Gall, Gall, & Borg, 2007). The next step involved determining the sample size of this study. The required sample size depends on factors such as the proposed data analysis techniques, financial and access to sampling frame (Malhotra, 2008). The proposed data analysis technique for this research is Structural Equation Modeling, which is very sensitive to sample size and less stable when estimated from small samples (Tabachnick & Fidell, 2007). As a general rule of thumb, at least 300
cases is deemed comfortable, 500 as very good and 1000 as excellent (Comrey & Lee, 1992; Tabachnick & Fidell, 2007), thus it was decided to target a total of at least 500 respondents from the 8 travel agencies mentioned above so as to make this study reliable.

4.6.4 Data Collection Method

The present study is based on both primary and secondary data sources for collecting facts and figures related to topic.

4.6.3.1 Primary Data

Primary data collection has been carried out using a structured close ended questionnaire. The research questionnaire captures all the dimensions of the study using items. The responses of respondents are recorded using a 5-point Likert scale. The questionnaires are administered personally and online both. For online mode, questionnaire was developed with the help of Google drive.

4.6.3.2 Secondary Data

The study gets started with exploring the secondary data to build a theoretical and conceptual framework of the study. The secondary data for this study includes numerous sources for studies in the related subject area. Some of these sources are; relevant books, publications, magazines, published and unpublished dissertations, periodicals, journals, official websites and annual reports of Ministry of Tourism. Researcher has also visited libraries of various universities for the search of literature related to the topic of the study.
4.7 Questionnaire Design

According to Malhotra and Birks (2007) questionnaire may be defined as a structured technique for data collection consisting of a series of questions, written or verbal, that a respondent answers. Any questionnaire has three specific objectives. First, it must translate the information needed into a set of specific questions that the respondents can and will answer. Second, a questionnaire must uplift, motivate and encourage the respondent to become involved, to cooperate, and to complete the task. Third, a questionnaire should minimize response error. Therefore, this section presents the steps that have been followed to develop the draft of questionnaire. The design process is founded upon objective of the study that will effectively support researcher. The design of questionnaire and its administration for the proposed study followed the steps adopted from DeVellis’s (2003) as shown in Figure 4.4;
4.7.1 Training Culture (TC) Scale: Construction and Initial Validation

A new scale is constructed when existing scales do not represent the construct adequately, scales contain lack of reliability, lack of validity, is outdated (old words; meaning of words changed; attitudes changed), and insensitive for changes (Nussbeck, 2009). While there are good theoretical reasons to believe that having training culture in organization promotes growth and development of employees, the construct has not yet been examined empirically. Literature is replete with questionnaire, but most of them are assessing training effectiveness, training transfer, training and development etc. (Meyer & Smith, 2000; Abbad, Andrade & Sallorenzo,
In order to achieve research goal of assessment of training culture in LSTAs, need for constructing a new scale containing all the important dimensions, is realized. Hence, a scale is designed to measure the three main constructs of Training Culture on separate subscales (training design, trainee’ attitude and supervisor support for training) with the intention of summing the subscale scores to create a total score that would represent an organization’s overall level of Training Culture (TC). The inclusion of subscales in the measure is theoretically motivated, so that the constituent components of training culture may be reflected in the scale design. However, the subscales are expected to be highly intercorrelated, and the main motto of the scale is to assess training culture as a single overarching construct. An original, valid and reliable measure of TC is expected to be a boon for proper assessment of training culture in LSTAs across culture and demographic segments.

4.7.1.1 Item Generation

Each item of the instrument has been designed to obtain information from the employees of LSTA on how they feel about training culture of their agency. Thus, the instrument has undergone through several iterations to achieve the final goal. This questionnaire is developed after a careful review of Bill Gillham’s (2000) book, “Developing a Questionnaire” and numerous articles on development and validation of scale (Duckworth & Quinn, 2009; Hassad, 2007; Kneff, 2003). Based on research literature as well as an array of instruments for measuring training in previous studies, a list of items is generated. Initially, most of the items are drawn from previous instruments used in training studies that have established validity (Meyer & Smith, 2000; Abbad, Andrade & Sallorenzo, 2004; Tesemma & Soeters, 2006; Azman, Sieng, Ajis, Dollah, & Boerhannoeddin, 2009; Mwesigwa, 2010; Pandey, 2011; Alhassan, 2012), and are compiled. Each item is then carefully examined and is weighed for its presumed representation of Training Culture. Items that did not appear to be content relevant are eliminated, and unclear items are reworded. The items for each factor not only measured the knowledge gained but also measured the understanding, interpretation and analysis. The items are then restated based on the nature of the employees of travel agencies for which the instrument is created. Finally
a pool of 37 items is generated. Each item is generated as a statement capturing factors of training culture.

While developing items Researcher employed due diligence in analyzing each item in order to avoid frequencies in item wording, avoid confusing questions, leading or loaded questions, avoid item wordings including negative mood and avoid negatives to reverse meaning of an item (Page & Meyer, 2000; Whitley, 2002; Groves, Fowler, Couper, Lepkowski, Singer & Tourangeau, 2008). The items have been then submitted to a panel of content knowledgeable experts. The items have again been edited to derive the items and instruments and expert review process is initiated.

4.7.1.2 Pre-Testing With Subject Expert (Content Validity)

The protocol for the content validation process is based on that recommended by Kerlinger and Lee (1986) and Haynes and O'Brien (2000). Content validity deals with how representative and comprehensive the items are in creating the scale and are the representative or sampling adequacy of the content substance, the matter, and the topic of a measuring instrument (Kerlinger & Lee, 1986). It is assessed by examining the process by which scale items are generated. Content validity in this study is relatively acceptable since the various parts of questionnaire are all based on the literature review and on the opinions of several experts who examined the items.

As per the suggestion from Cooper and Schindler (2003), a panel of experts was contacted to judge how well the Training Culture (TC) Scale meets the standards. An expert review of the items was conducted to assess the content validity of the survey by requesting detailed responses concerning clarity, relevance, and quality of items. The expert panel consisted of 10 experts, 5 of them are the experts from corporate sector who have more than five year experiences. 2 of experts are from the area of methodology and their interests include quantitative research techniques. The other 3 experts are from Human Resource Development (HRD) background. The researcher contacted these individuals through personal meeting, electronic mail, and by telephone to request their assistance in serving as expert reviewers for this study.
The reviewers have been provided with a letter explaining the intent of the study as well as the process of framing questionnaires and the measurement scale. They have been given an expert rating sheet and asked to rate each item on both clarity and relevance on a three point scale (Appendix B). It was also asked to discuss the effectiveness of the items for each variable. Additional comments on items and measures as a whole also solicited where the investigator personally noted all the suggestions and comments. The results of the expert review are compiled on a summary sheet. Each item is reviewed considering the individual item comments. Several items are revised due to these comments, some of the items were deleted, and a few new items are added. At the end 25 items are finalized to proceed further.

4.7.1.3 Pilot Study of Training Culture (TC) Scale

A pilot test has been undertaken on completion of the first draft of the questionnaire (Malhotra, 2008). The main rationale of the pilot study is the pragmatic evaluation of instruments, with a purpose to probe and examine their psychometric attributes and features in socio-cultural perspective, for subsequent acceptance and utilization in the main study (Welman & Kruger, 2000; Page & Meyer, 2000; Whitley, 2002). This helps the researcher to make improvements where necessary.

The pilot study took place in LSTAs at Delhi, where 31 employees from different departments answered the questionnaires. After the pilot test, the questionnaire proposed time has been revised as it was found that more time was needed. In addition, some questions in the questionnaire were revised to make it more easily understandable to the participants, while safeguarding same objectives of the questions. Minor amendments are also made to the demographical information section on the piloted questionnaire before it was administered to the larger research sample.

4.7.1.4 Administration of Training Culture (TC) Scale

The next part is survey administration of TC Scale. Psychometric evaluation of scale is very important before using this scale for the main purpose of study. Therefore the administration of TC Scale was done, so that if there is any evaluation issue in the TC Scale that can be sorted out before the final data collection. And researcher can come to the conclusion whether TC Scale can be used for the proposed
objectives or not. At this stage *TC Scale* comprised 20 items comprised from pilot test. The instrument has a different section eliciting demographic details i.e. age, gender, academic qualification and work experience. Measurement scheme adopted is five-point Likert scale ranging from strongly agree to strongly disagree. Data collection was done over a period of two months i.e. in September 2015 and October 2015. Convenience and snowball sampling were employed. *TC Scale* was administered to 250 employees in travel agencies. Out of which only 171 were found complete in all respects. The profiles of the respondents are introduced in Table 4.1.

### Table 4.1: Sampling profile of the Respondents

<table>
<thead>
<tr>
<th>Gender</th>
<th>Males (128)</th>
<th>Females (43)</th>
<th>25-35 (82)</th>
<th>35-45 (36)</th>
<th>Above 45 (14)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>Below 25 (39)</td>
<td>25-35</td>
<td>35-45</td>
<td>Above 45</td>
<td></td>
</tr>
<tr>
<td>Academic Qualification</td>
<td>Post Graduate/Graduate (69)</td>
<td>Professional Qualification (55)</td>
<td>Graduation (29)</td>
<td>Any Other (18)</td>
<td></td>
</tr>
<tr>
<td>Work Experience</td>
<td>Below 2 (47)</td>
<td>2-5 (48)</td>
<td>5-8 (49)</td>
<td>Above 8 (27)</td>
<td></td>
</tr>
</tbody>
</table>

### 4.8 Psychometric Evaluation

In order to test the psychometric properties of the scale the following statistical tests were performed:

4.8.1 Assumptions of Parametric Testing
4.8.2 Sample Adequacy
4.8.3 Exploratory Factor Analysis
4.8.4 Confirmatory Factor Analysis
4.8.5 Reliability Analysis
4.8.6 Validity Analysis

### 4.8.1 Assumptions of Parametric Testing

There are certain assumptions that need to be catered before parametric tests. The first assumption is to check whether the data are normally distributed.
Subsequently, for checking the normality of the data collected, descriptive statistics are assembled. Skewness and Kurtosis are used to judge the normality of data. Skewness means that the responses did not fall into a normal distribution but were heavily weighted toward one end of the scale and Kurtosis refers to the peakedness or flatness of the distribution of data (http://statwiki.kolobkreations.com). Though, a normal distribution has both skewness and kurtosis values equal to zero (Malhotra, 2008; Field, 2009), for psychometric purposes, skewness and kurtosis values between -2 to +2 is acceptable (George & Mallery, 2010; Khan, 2015). Table 4.2 shows the values of skewness and kurtosis, it is noticeable from the table that these values fall within the acceptable range of -2 to +2, indicating that the data are fairly normal and the basic assumption of parametric testing is fulfilled.

<table>
<thead>
<tr>
<th>Scale</th>
<th>No of respondents</th>
<th>Skewness Statistics</th>
<th>Skewness Std. Error</th>
<th>Kurtosis Statistics</th>
<th>Kurtosis Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>TC</td>
<td>171</td>
<td>-.118</td>
<td>.186</td>
<td>-.501</td>
<td>.369</td>
</tr>
</tbody>
</table>

The second assumption of parametric testing is in respect of Homogeneity of variance. This assumption suggests that all data should have same or similar variances. For checking this assumption, researcher employed Levene’s Test for equality of variance. If Levene’s Test is non-significant (i.e. p>0.05) then researcher must accept that the difference between variance is zero (or roughly zero). Researcher found data to be acceptable in this regard.

The third assumption is in respect of Independence. This implies that the behaviour of one participant does not influence the behaviour of another. Since, the data were collected by researcher of human beings i.e. employees, utmost care was taken in this regard.

Conclusion from the above discussion is that the data collected for the study met all assumptions of parametric testing and is fit for further analysis.

### 4.8.2 Sample Adequacy

Sample adequacy is a measure using Kaiser-Meyer-Olkin (KMO) test (Kaiser & Rice, 1974; Field, 2009). Pre analysis for the suitability of entire sample for factor
analysis is computed as recommended by Comrey (1978). The Kaiser-Meyer-Olkin (KMO) Measure of Sampling represents the ratio of the squared correlation between variables to the squared partial correlation between variables. It varies between 0 and 1, where a value close to 1 indicates that the patterns of correlations are relatively compact and should yield distinct and reliable factors (Field, 2009). According to Hutcheson and Sofroniou (1999), values between 0.5 and 0.7 are mediocre, between 0.7 and 0.8 are good, values between 0.8 and 0.9 are great, and above 0.9 are superb. Results for this research are identified in Table 4.3, which shows that the KMO measure of sampling adequacy falls into the good range, as identified by Hutcheson and Sofrinou (1999), which indicates that the sample size is adequate to yield distinct and reliable factors.

| Kaiser-Meyer-Olkin Measure of Sampling Adequacy | .758 |
| Bartlett’s test of Sphericity | Approx. Chi-Square | 672.213 |
| | Df | 66 |
| | Sig | .000 |

Bartlett’s Test (Bartlett, 1954) determines whether the correlations between survey items are large enough for factor analysis to be appropriate. It is another indicator of the strength of relationship among variables i.e. whether or not the correlation matrix is sufficiently different from the identity matrix, testing whether the diagonal elements of the variance-covariance matrix are equal indicating the group variances are the same, and that the off-diagonal elements are approximately zero indicating that the dependent variables are not correlated. A significant test will favour rejection of the null hypotheses and indicate that there are some relationships among the variables, thus confirming the appropriateness of applying factor analysis. In this research, the Bartlett’s test results indicate that Chi-square statistic is 672.213 with significance less than 0.001. It shows that the sample in this research is a correlation matrix not an identity matrix, hence suitable for further analysis.
4.8.3 Exploratory Factor Analysis

The broad purpose of factor analysis is to summarize data so that relationships and patterns can be easily interpreted and understood. It is normally used to regroup variables into a limited set of clusters based on shared variance. Hence, it helps to isolate constructs and concepts. Factor analysis operates on the notion that measurable and observable variables can be reduced to fewer latent variables that share a common variance and are unobservable, which is known as reducing dimensionality (Bartholomew, Knott, & Moustaki, 2011). These unobservable factors are not directly measured but are essentially hypothetical constructs that are used to represent variables (Cattell, 1973).

Factor analysis is considered as the method of choice for interpreting self-reporting questionnaires (Byrant, Yarnold, & Michelson, 1999). It uses mathematical procedures for the simplification of interrelated measures to discover patterns in a set of variables (Child, 2006). Factor analysis is a multivariate statistical procedure that has many uses, three of which are; firstly factor analysis reduces a large number of variables into a smaller set of variables (also referred to as factors); secondly, it establishes underlying dimensions between measured variables and latent constructs, thereby allowing the formation and refinement of theory; thirdly, it provides construct validity evidence of self-reporting scales (Gorsuch, 1983; Hair, Anderson, Tatham & Black, 1995; Tabachnick & Fidell, 2007).

Nunnally (1978) adds that factor analysis is intimately involved with questions of validity and it is at the heart of the measurement of psychological constructs. There are two major classes of factor analysis: Exploratory Factor Analysis (EFA), and Confirmatory Factor Analysis (CFA). EFA tries to uncover complex patterns by exploring the dataset and testing predictions while CFA attempts to confirm hypotheses and uses path analysis diagrams to represent variables and factors (Child, 2006).

EFA is normally the first step in building scales or a new metrics (Yong & Pearce, 2013). EFA is often considered to be more appropriate than CFA in the early stages of scale development because CFA does not show how well items load on the non hypothesized factors (Kelloway, 1995). Broadly speaking EFA is heuristic. In EFA, the investigator has no expectations of the number or nature of the variables and
as the title suggests, is exploratory in nature. That is, it allows the researcher to explore the main dimensions to generate a theory, or model from a relatively large set of latent constructs often represented by a set of items (Pett, Lackey & Sullivan, 2003; Henson & Roberts, 2006). For example, scores on an oral presentation and an interview exam could be placed under a factor called ‘communication ability’; in this case, the latter can be inferred from the former but is not directly measured itself (Yong & Pearce, 2013 as cited in DeCoster, 1998). In this study, since there is no research evidence into the underlying structure of training culture, exploratory analysis was chosen before confirmatory factor analysis.

EFA involves many linear and sequential steps, and many options and rules of thumb apply themselves to EFA emphasizing that clear decision sequencing and protocols are paramount in each investigation (Williams, 2012). Firstly for something to be labeled as a factor it should have at least 3 variables, although this depends on the design of the study (Tabachnick & Fidell, 2007). Another consideration when deciding how many factors will analyze data is whether a variable might relate to more than one factor. Rotation maximizes high item loadings and minimizes low item loadings, therefore producing a more interpretable and simplified solution (Williams, 2012). For example, variables that relate to language should load highly on language ability factors but should have close to zero loadings on mathematical ability. There are several methods to carry out rotations. SPSS (Statistical Package for the Social Sciences) offers five: varimax, quartimax, equamax, direct oblimin and promax. The first three options are orthogonal rotation; the last two oblique. Orthogonal rotation is when the factors are rotated 90° from each other, and it is assumed that the factors are uncorrelated (Rummel, 1970; DeCoster, 1998). This is less realistic since factors generally are correlated with each other to some degree (Costello & Osborne, 2005). Two common orthogonal techniques are Quartimax and Varimax rotation. Quartimax involves the minimization of the number of factors needed to explain each variable (Gorsuch, 1983). Varimax minimizes the number of variables that have high loadings on each factor and works to make small loadings even smaller. Oblique rotation is when the factors are not rotated 90° from each other, and the factors are considered to be correlated. Oblique rotation is more complex than orthogonal rotation, since it can involve one of two coordinate systems: a system of primary axes or a system of
reference axes (Rummel, 1970). It depends on the situation, but mostly varimax is used in orthogonal rotation and direct oblimin in oblique rotation.

Finally, for the purpose of this study, researcher selected varimax rotation in the rotation menu, chose to display the factor score coefficient matrix in the scores menu and opted for listwise exclusion, sorting by size and suppression of absolute values less than 0.40 in the options menu. Researcher has chosen for a value of 0.40 because the sample is not very big.

There are many criterions to retain factors, one criterion that can be used to determine the number of factors to retain is Kaiser’s criterion which is a rule of thumb. This is used by this study to retain factors. This criterion suggests retaining all factors that are above the eigenvalue of 1 (Kaiser, 1960). Table 4.4 presents the results of factor analysis for TC Scale. In the principal component analysis, results of this research demonstrate that 3 factors were extracted from the 20 items of TC, explaining 60.092% of the total variance.

<table>
<thead>
<tr>
<th>Var_9</th>
<th>Component 1</th>
<th>Component 2</th>
<th>Component 3</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>.792</td>
<td></td>
<td></td>
<td></td>
<td>3.47</td>
<td>1.014</td>
</tr>
<tr>
<td>Var_11</td>
<td>.742</td>
<td></td>
<td></td>
<td>3.56</td>
<td>1.080</td>
</tr>
<tr>
<td>Var_10</td>
<td>.700</td>
<td></td>
<td></td>
<td>3.54</td>
<td>1.047</td>
</tr>
<tr>
<td>Var_1</td>
<td>.674</td>
<td></td>
<td></td>
<td>3.59</td>
<td>.944</td>
</tr>
<tr>
<td>Var_14</td>
<td>.608</td>
<td></td>
<td></td>
<td>4.06</td>
<td>.899</td>
</tr>
<tr>
<td>Var_16</td>
<td>.800</td>
<td>.783</td>
<td></td>
<td>3.95</td>
<td>.893</td>
</tr>
<tr>
<td>Var_19</td>
<td>.783</td>
<td>.735</td>
<td></td>
<td>3.86</td>
<td>1.048</td>
</tr>
<tr>
<td>Var_17</td>
<td>.735</td>
<td>.704</td>
<td>.782</td>
<td>3.88</td>
<td>.953</td>
</tr>
<tr>
<td>Var_18</td>
<td>.704</td>
<td>.776</td>
<td>.734</td>
<td>3.98</td>
<td>.861</td>
</tr>
<tr>
<td>Var_5</td>
<td></td>
<td>.782</td>
<td></td>
<td>3.61</td>
<td>.966</td>
</tr>
<tr>
<td>Var_13</td>
<td></td>
<td>.776</td>
<td></td>
<td>3.75</td>
<td>.945</td>
</tr>
<tr>
<td>Var_15</td>
<td></td>
<td>.734</td>
<td></td>
<td>4.04</td>
<td>.923</td>
</tr>
</tbody>
</table>

Total Variance Explained = 60.029

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
In analyzing the results of the rotated component loadings of *Training Culture Scale*, the factor loadings of all were well above the threshold of 0.50 (Hair, Black, Babin, Anderson & Tatham, 2006) except Var_2, Var_4, Var_6, Var_8 and Var_20. Hence these five are eliminated from the scale. Var_3, Var_12 and Var_7 are loaded on two components, hence these were also eliminated from scale. Finally the themes that emerged after rotated component loadings of *TC Scale are:* Component 1 survey items contain 5 items and relates to supervisor support. Component 2 survey items contain 4 items and relate to training design. While component 3 survey items relate to trainee characteristic and contain 3 items. Finally TC Scale reported to have 12 items in total.

4.8.4 Confirmatory Factor Analysis

A line of research begins with studies utilizing EFA while later work demonstrates what can be confirmed. EFA is suitable for scale development while CFA is favoured where measurement models have a well-developed underlying theory for hypothesized patterns of loadings. Gerbing and Hamilton (1996) in a study by using Monte Carlo methods found that EFA can add to model specification when applied prior to cross-validation using CFA. Therefore confirmatory factor analysis is recommended.

Confirmatory factor analysis (CFA) alludes to as restricted factor analysis (Hattie & Fraser, 1988), structural factor analysis, or the measurement model, or technique used for identifying groups or clusters of variables whereby specific hypotheses about the structure and the relations between the latent variables that underlie the data can be tested (Field, 2009). It is ordinarily used in a deductive mode to test hypotheses with respect to unmeasured sources of variability responsible for the commonality among a set of scores (Hoyle, 2000). For this analysis, the entire 12 items were used to determine whether or not good factor loadings could be obtained. In CFA the researcher uses this approach to test a proposed theory (CFA is a form of structural equation modelling), or model and in contrast to EFA, has assumptions and expectations based on priori theory regarding the number of factors, and which factor theories or models best fit (Williams, 2012).
CFA output includes fit indices. There are no set rules for assessing the model fit per se. but reporting a variety of indices is advised. For the present study most commonly reported indices have been chosen which include normed chi-square, Root Mean Square of approximation (RMSEA), which is an absolute fit index; Goodness of fit (GFI), Adjusted goodness of fit (AGFI) and, Comparative fit index (CFI), Incremental Fit Index (IFI); Tucker Lewis Index (TLI). A detailed discussion of model fit indices is carried out in the next chapter (Section 6.6).

The validity assessment of TC Scale was performed using a CFA. The validity inspection of this measurement model indicated that some indices model fit were not satisfied (GFI=.896, AGFI=.841, IFI=.875, CFI=.872, RMSEA=.096). Although all standardized regression weights or factor loading estimates were found to be significantly above 0.50, hence no variable dropped out. Further, an examination of modification indices suggested that fit could be improved significantly by freeing the corresponding error covariance parameter between the error terms for the measured variables Var_10 and Var_14, Var_18 and Var_19.

Therefore, a revised CFA was repeated to examine the improved level of model fit. The final CFA results of the TC Scale are presented in Table 4.5. These result suggested that the measurement model of structural infrastructure provided a reasonably good fit: \( \chi^2/df=1.986, \text{GFI}=0.919, \text{IFI}= 0.925, \text{CFI}= 0.923, \text{AGFI}=0.871, \text{RMSEA}=0.076 \). All factors loadings, ranging from 0.52 to 0.85, were greater than the threshold level of 0.50.

### Table 4.5: Fit Indices for Confirmatory Factor Analysis

<table>
<thead>
<tr>
<th>Fit Indicators</th>
<th>Observed Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>( \chi^2/df )</td>
<td>1.986</td>
</tr>
<tr>
<td>GFI</td>
<td>.919</td>
</tr>
<tr>
<td>IFI</td>
<td>.925</td>
</tr>
<tr>
<td>CFI</td>
<td>.923</td>
</tr>
<tr>
<td>sAGFI</td>
<td>.871</td>
</tr>
<tr>
<td>RMSEA</td>
<td>.076</td>
</tr>
</tbody>
</table>
4.8.5 Reliability Analysis

According to Peterson (1994), there is virtual consensus among researchers that, for a scale to be valid and possess practical utility, it must be reliable. Bryman and Cramer (2005) defined reliability as the degree to which an instrument measures the same way each time it is used under the same conditions with the same object.

In this study, the TC Scale used three factors to measure the constructs proposed in the research conceptual framework, namely training design, trainee characteristics and supervisor support. To ensure that such a set of measurement scales consistently and accurately captured the meaning of the constructs, an analysis of scale reliability was performed. Cronbach’s alpha is by far the most popular
measure of reliability (Peterson, 1994; Hogan, Benjamin & Brezinski, 2000; Iacobucci & Duhachek, 2003). Researcher opted for Coefficient alpha to examine reliability of TC Scale. Coefficient alpha takes into account the effect of each item in estimating the overall reliability (Fried & Ferris, 1987). The scale is considered reliable if the Cronbach’s alpha is greater than 0.70 (Nunnally, 1978; Hair, Black, Babin & Anderson, 2010). Others have regarded a value greater than 0.50 as workable (Erdogan, 2009; Vashist, Wadhwa & Uppal, 2012). The cronbach’s alpha for all the constructs exceeded the level of acceptance as suggested by Nunnally (1978), and Hair, Black, Babin and Anderson, (2010) and shown in Table 4.6.

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Cronbach’s alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training Design (TD)</td>
<td>0.774</td>
</tr>
<tr>
<td>Supervisor Support (SS)</td>
<td>0.794</td>
</tr>
<tr>
<td>Trainee’ Characteristics (TCS)</td>
<td>0.763</td>
</tr>
</tbody>
</table>

4.8.6 Validity Analysis

Validity is an altogether more complex concept. Usual definition of validity is that it tells us whether an item or instrument measures or describes what it is supposed to measure or describe, but this is rather vague and leaves many questions unanswered (Bell, 2005). If an item is unreliable, then it must also lack validity, but a reliable item is not necessarily also valid. It could produce the same or similar responses on all occasions, but not be measuring what it is supposed to measure. Measuring the extent of validity can become extremely involved, and there are many variations and subdivisions (Bell, 2005). In broad sense, validity means that the data and the methods are right. In terms of research data, the notion of validity hinges around whether or not the data reflect the truth, reflect reality and cover the crucial matter (Denscombe, 2007). Content validity was achieved primarily during the early stages of instrument development, and refers to the extent to which the items in the scale capture or reflect the theoretically and empirically supported facets of the construct being measured (Nunnally, 1978). This was facilitated by a thorough consultation with experts. Face validity (pilot test) has also been already conducted for the TC Scale. This section would cover construct validity.
4.8.6.1 Construct Validity

Construct validity of a scale can be established by convergent validity and discriminant validity. According to the principle of convergent validity, measures of theoretically similar constructs should be substantially intercorrelated. Each of the three subscales (of the final solution) is considered as a “method” for measuring the training culture, given the conceptual relatedness of the factors. For this study, researcher calculated the inter-item correlation values. Barring a few items, the values were in range of 0.2-0.5 as recommended by previous researchers (Nunnally, 1978; Kerlinger & Lee, 2000; DeVellis, 2003; Netemeyer, Bearden & Sharma, 2003; Terblanche & Boshoff, 2004; Blankson & Kalafatis, 2004; Dhurup, Venter, Ossthuyzen, 2005)

Discriminant validity is the extent to which a construct is truly distinct from other constructs. It means that a latent variable should explain better the variance of its own indicators than the variance of other latent variables. In other words the loading of an indicator on its assigned latent variable should be higher than its loadings on all other latent variables. For discriminant validity, researcher examined the factor correlation matrix and found that the values are less than 0.6 as shown in Table 4.7 (Carlson, Kacmar & Williams, 2000).

<table>
<thead>
<tr>
<th>Construct</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training Design (TD)</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supervisor Support (SS)</td>
<td>.345</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>Trainee Characteristics (TCS)</td>
<td>.099</td>
<td>.417</td>
<td>1.000</td>
</tr>
</tbody>
</table>

A rigorous regime of statistical testing was followed in the first phase of the scale development process to ensure that a robust measure of TC is available for the final analysis. The process helped reveal various insights about measurement of TC. In conclusion, the EFA and CFA developed and confirmed good measurement scales for Training Culture (TC) comprising of sub-constructs: training design (TD), supervisor support (SS), trainee characteristics (TCS), with very good reliability, validity and defined components. These scales are further used for final data
collection for identifying the relationship of these constructs with certain job behavioural variables.

### 4.9 Final Research Instrument Design

Each item of the instrument is designed to obtain data from the employees of LSTAs on how they feel about training culture of their agency. Thus, the instrument went through several iterations to achieve the final goal.

The questionnaire for this study is composed of three sections (see Appendix A): Section I is comprised of three scales measuring Training Culture (TC). Section II consisted items measuring employee performance, organizational commitment and turnover intention. The final section of the research instrument contained items related to demographic information. Existing and established instruments are used for measuring employee performance, organizational commitment and turnover intention while scale for measuring Training Culture is constructed by researcher in the initial phase of the study. The necessary instructions regarding questions have been given in the beginning of the questionnaire, which helps in providing convenience in answering and ensured that the questionnaire is filled properly by respondents. The design and structure of the questionnaire is simple, study-specific, has multiple choice of answer to be chosen through ticking only of the statement which respondents consider most appropriate as per their agreement or disagreement.

#### 4.9.1 Measuring Training Culture

This scale is developed by the researcher in the initial phase of the study with the help of subject matter experts. *TC Scale* is a 5-point Likert scale containing 12 items for 3 constructs. Three construct in *TC Scale* is represented by different number of items, viz. training design is represented by 5 items, Supervisor Support is represented by 4 items and Trainee Characteristics is represented by 3 items.
Table 4.8: Distribution of Items in Scale

<table>
<thead>
<tr>
<th>S No. of items in the instrument</th>
<th>Construct of TD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Var_16, Var_19, Var_17, Var_18</td>
<td>Training Design</td>
</tr>
<tr>
<td>Var_9, Var_11, Var_10, Var_1, Var_14</td>
<td>Supervisor Support</td>
</tr>
<tr>
<td>Var_5, Var_13, Var_15</td>
<td>Trainee Characteristics</td>
</tr>
</tbody>
</table>

4.9.2 Measuring Employee Performance

Employee Performance is measured by five items of a scale taken from Azman, Sieng, Ajis, Dollah and Boerhannoeddin (2009). These items have been adapted and modified in order to make them clear to employees. Each item used a five point response scale that ranged from 1 (strongly disagree) to 5 (strongly agree). The scale consists of five items including:

- I feel more confident upon attending training.
- My job yields more quality after attending training.
- I am able to solve any work-related problems.
- I am able to work with minimum guidance and supervision.
- I am able to solve any work-related problems quickly.

4.9.3 Measuring Organizational Commitment

Eight items from Meyer and Allen’s (1990) affective commitment scale are employed to measure organizational commitment among employees of LSTAs under study. These items have been adapted and modified to suit the travel agency setting. The word organization has been replaced by the word travel agency. Each item used a five point response scale that ranged from 1 (strongly disagree) to 5 (strongly agree). These items are:

- I would be very happy to spend the rest of my career in this travel agency
- I enjoy discussing my travel agency with people outside it
- I really feel as if this travel agency’s problems are my own
• I think I could not easily become as attached to another travel agency as I am to this one.
• I feel like a member of the family at this travel agency.
• I feel “emotionally attached” to this travel agency.
• This travel agency has a great deal of personal meaning for me.
• I do not feel a strong sense of belonging to this travel agency.

### 4.9.4 Measuring Turnover Intention

To measure turnover intention four items from the Staying or Leaving Index (SLI) (Bluedorn, 1982), has been employed which is one of the few measures of turnover intention and has been validated too (Hsu, 2009). These items have been adapted and modified to suit the travel agency setting. The word company has been replaced by the word travel agency. Each item used a five point response scale that ranged from 1 (strongly disagree) to 5 (strongly agree). The four items of turnover intention include:

• If I can find a better job, I will leave this travel agency.
• I often think about quitting my current job.
• I will look for a new job outside of this travel agency within the next six months.
• I will look for a new job outside of this travel agency within the next year.

### 4.9.5 Background Information

Background information questions are used to profile the respondents and to summarize relevant information about their organizations. The four demographic measures included in the questionnaire are; age, gender, qualification and work experience. Such background information is important for searching conclusions of the study. **Question No. 1** deals with the age of employees while **Question No. 2** enquire about their gender, **Question No. 3** reports their academic qualification, and **Question No. 4** asks their work experience in present travel agency.
Table 4.9: Summary of the Scale

<table>
<thead>
<tr>
<th>Sections</th>
<th>Construct</th>
<th>Items</th>
<th>Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Demographics</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>II</td>
<td>Training Culture</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Training Design</td>
<td>5</td>
<td>TC Scale (developed by Researcher)</td>
</tr>
<tr>
<td></td>
<td>Trainee’ Characteristics</td>
<td>4</td>
<td>TC Scale (developed by Researcher)</td>
</tr>
<tr>
<td></td>
<td>Supervisor role</td>
<td>3</td>
<td>TC Scale (developed by Researcher)</td>
</tr>
<tr>
<td>III</td>
<td>Job-Behavioural Variable</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Organizational Commitment</td>
<td>8</td>
<td>Meyer and Allen (1990),</td>
</tr>
<tr>
<td></td>
<td>Turnover Intention</td>
<td>4</td>
<td>(Bluedorn, 1982)</td>
</tr>
<tr>
<td></td>
<td><strong>Total Items</strong></td>
<td>33</td>
<td></td>
</tr>
</tbody>
</table>

4.10 Pilot Study of Final Instrument

Before embarking on full-fledged survey, a pilot study is conducted (Yin, 2003) in order to rule out error in the final data collection with the final instrument including *TC Scale*. This study has been devised to point out and to assess, at a prelude phase, any difficulty in understandability and precision of the questionnaire. Carrying out a pilot study on a limited number of respondents from the research sample provides a number of benefits such as: aiding in detecting flaws in the measurement procedures, helping to identify ambiguously formulated items and also allowing the researcher to notice some non-verbal behaviour (Welman & Kruger, 2000; Teijlingen & Hundley, 2001).

The final instrument has been pilot tested with 45 samples of individuals considered to be representative of the population from which the study is to draw the survey respondents. This test ensured the internal validity of the instruments. The result of the pilot test ensured internal validity, comprehensibility of the directions, and item content. It also verified the amount of time required for responses and other
logistical issues. As a result of the pilot tests, no revisions have been made to the questionnaires and procedures and therefore, the responses of pilot data are included in the final analysis.

4.11 Data Collection for the final study

Many methods of collecting survey data exist, each with its own advantage and disadvantages. In this research, questionnaire has been administered to the employees of different departments of LSTAs under study to collect the first hand information. Questionnaire has been administered via;

- Personal Administration
- Online Survey

4.11.1 Personal Administration

A paper-pencil version of questionnaire was prepared and administered to the employees working in selected LSTAs through their HR managers. In order to get the responses from more employees of the travel agencies, purposive sampling method is applied. This led the research result potentially representative.

4.11.2 Online Survey

The questionnaire was created on Google drive via forms and sent to the respondents through email. The respondents would fill the questionnaire and clicks submit button and researcher would get the response in her email id. Snowball sampling method has been used to get more responses. This method is selected by considering time factor for the survey and population. In snowball sampling the questionnaires are sent through known friends, colleagues and they further send to known contacts. With respect to this study, questionnaires have been sent through supervisor since she is having contacts with many alumnus of Aligarh Muslim University, working in these travel agencies. The three reasons for mail survey are; first, mail questionnaire can cover a wide geographical area (Sekaran, 2003); second, through such a survey it is easier to reach a large number of respondents and obtain a generalized view of the situation in the research target; third, this method has been
commonly used in recent studies (Polotis, 2001; Moffett, McAdam & Parkinson, 2003)

In total, 245 responses were collected through Google drive and 167 through paper-pencil version, making a total of 412 responses.

4.12 Preliminary examination of data

This section presents the screening and cleaning of raw data before they are analyzed. Data screening and preparation involved the following procedures in this study: (1) screening missing data; (2) checking outliers; and (3) testing the normality.

Firstly, screening of the data sets is conducted through an examination of basic descriptive statistics and frequency distributions. Values that are found to be out of range or improperly coded are detected with straightforward checks (Kassim 2001). A frequency test is run for every variable to detect any illegal and missing responses. 27 cases with missing responses are noted and deleted; therefore 27 questionnaires are rejected on the ground of screening and cleaning of data. To check the variable discrepancies, variable screening is performed. Researcher checked the variable missing data by calculating the frequency of the entire data set. This revealed no missing values.

Secondly, researcher tested for the outliers in the data, with the help of SPSS certain outliers are found out and are replaced with the mean value of the respective factor.

Third is the testing of normality. Though in psychological data, absolute normality is rare (Micceri, 1989) yet the researcher assessed the normality of the data. There are number of ways for normality assessment such as MKI eyeball test, Skewness-Kurtosis, P-P plots, K-S Lilliefors Test and Shapiro-Wilk test. Researcher employed Skewness-Kurtosis. For psychometric purpose, skewness and kurtosis values range between -2 to +2 is acceptable. The values of these tests are found within the acceptable limit, hence data are absolutely normal.

The above process led to the final sample size of 386 respondents. For multivariate analysis sample size of 300 is considered good (Wimmer & Dominick, 2000). Also samples above 200 are considered fine for SEM estimation (Bentler &
Chou, 1987; Jaccard & Wan, 1996; Loehlin, 1998; Kline, 2005). Therefore, sample size for this study is found fit for multivariate analysis.

### 4.13 Data Analysis Pattern

For analyzing the data different statistical tools have been used according to the need of study. Firstly necessary statistical tools have been studied and then applied for analyses of this research. In this study, the analysis part uses the statistical software named Statistical Package for Social Scientists (SPSS 20) and Analysis of Moment Structures (AMOS 20). Firstly, data have been saved to Microsoft Excel file then all the necessary steps have been followed to transfer data to SPSS from Microsoft Excel file. Three major statistical analysis methods have been used in this research which are;

- **Descriptive Analysis:** It was done to describe the basic features of the data in the study, with an objective of analyzing the mean scores and standard deviation scores.

- **Inferential Analysis:** It includes Independent sample t-test, ANOVA and Kruskal Wallis Tests to determine whether significant differences existed between respondents with respect to demographic variables.

- **Structural Equation Modelling:** It is an advance multivariate technique. It helps in empirical testing of the theoretically developed model. It further enabled the researcher to check for mediation in model.

### Summary

This chapter has discussed in detail the methodology employed for the research study. It focuses on TC scale development process and the development of final research instrument for data collection. In a deductive research approach, five point Likert survey containing 33 items was developed and issued to employees working in LSTAs. Data analytical methods and statistical tests used for testing the hypotheses have been discussed. For this study, data have been primarily derived from experiences of employees working in LSTAs at Delhi; psychometric evaluations were undertaken with SPSS in order to yield empirical evidence to gain understanding of the training culture phenomenon.