CHAPTER-IV
RESEARCH METHODOLOGY

4.1 Need of the Study:

Ethnography creates an interpretive framework through which it is better to understand the consumer internal (motivation, emotion) and external (contextual) factors which affect behavior. Under informal interviews consumers are in relaxed mood and interviewer can clearly understand shoppers’ experiences and clarify the effect of environmental factors. However, no systematic ethnographic survey of the state, as it exists today, was undertaken in the colonial period under the aegis of the ethnographic survey in British India, as in some princely states of the South. A thin ethnography existed in the provincial Gazetteer of Jammu and Kashmir territories written by W. R. Lawrence in 1875. There were ethnographic materials compiled during the 19th and 20th century. A comprehensive ethnography in Urdu was compiled in 1930 by Muhammad Din Fouq, Tarikh-i-Aqwam-i-Kashmir (Lahore, 1934) but it was not in print or in translation. Ethnography includes both qualitative and quantitative methods; and ethnography includes both classical and non-classical ethnographic approaches. The argument for the first is supported by the fact that while methods that are considered to be qualitative have long been the dominant methods paradigm in ethnography, many ethnographers trained in anthropology have long used quantitative methods as well, as the anthropological ethnographer learns to be open to any and all methods that can help him or her best understand the cultural system in which he or she is studying. The present study aims to understand the relationship of store choice and ethnic groups in Jammu region.

Previous studies on store choice have tended to be either highly abstract or theoretical (e.g., Fiske 1989; Shields 1992a) or thoroughly applied and technical (e.g., Retail Planning Associates 1978; McGoldrick and Thompson, 1992). Apart from narrow behavioral studies (e.g., Philips and Bradshaw, 1993), and researches on people’s everyday views on shopping relating to their changing attitudes and identities to the
actual use they make of particular consumption spaces and places. Unlike the many studies of spectacular ‘mega malls’ and sites of ‘Hedonic consumption’, and engaged directly with the views of ‘ordinary people’ in every day places (Miller, et al., 1998), our approach aims to understand the store choice behavior of ‘ordinary people’ in their everyday life, among different ethnic groups of Jammu region.

4.2 Objectives of the Study:

Based on the discussion in the introduction, literature review, and research gap section, the research objectives of this study are:

1. To identify the ethnic groups
2. To study the profile of ethnic groups
3. To study the shopping behavior of ethnic groups
4. To identify the drivers of store choice
5. To understand store choice behavior of selected ethnic groups

In order to fulfill these research objectives, it is mentioned to explore answers to the following research questions:

4.3 Research Questions:

R.Q.-1: What is the role of ethnicity on store choice?.

R.Q.-2: How does ethnicity influence the shopping behaviour of consumer?

4.4 Research Design:

After identification of research objectives and explication of the hypotheses, research design is an important step in any study. A research design actually guides the researchers during the course of collection, analysis and interpretation of observations and is the logical way of seeking proof for inferring the causal relation between the variables of interest (Frankfort-Nachmias and Nachmias, 2007). The research design helps in tackling the dilemma like the selection of observation, way of collection of data and applying a suitable tool to solve the problem under consideration faced by the researchers.
4.5. Approaches to Research Design:

There are normally three approaches to a research design namely qualitative, quantitative, and mixed method. The adherence to any one of these is determined by the knowledge being claimed in the study and the strategies to establish that claim. Creswell (2012) elaborated on the three approaches of research design and mentioned that the qualitative approach is mainly about making an inquiry of the knowledge claims which are based on multiple meanings of the socially and historically constructed experiences of the researchers. These experiences are intended to develop a theory and are also known as constructivist perspective in which the strategies of inquiry include narratives, ethnographies, case studies, phenomenologies and grounded theories. He also mentioned that the quantitative approach, on the other hand, utilizes the postpositive claims based on premises like cause and effect, hypotheses and questions, and measurement and observation to develop the knowledge in a given domain of inquiry. The strategies employed under quantitative approach include experiments and surveys for collecting the data and finding the results using appropriate statistical tools. He also mentioned that all methods may have limitations and using mix method approach has the possibility of neutralizing the inherent bias in one method by considering bias in the other method. It is also useful in the types of context when the result from one method can be used in the subsequent method (Greene, et. al., 1989). For mixed method approach, Creswell (2012) stated that the researchers firm up the claim for knowledge on grounds, like, consequence oriented and problem centred. The strategy of inquiry in such cases includes collection of data simultaneously or one after the other depending upon the suitability of the research problem. Since it borrows the elements both from qualitative and quantitative approaches, the nature of data collection in this approach includes the text as well as the numeric information. It was originated by Campbell and Fiske (1959) for a study on validity of the psychological traits.

Mixed method approach has been used as illustrated above for finding the answers to the research question in this study. As it is proposed to utilize the information obtained against the research question number one for using the same in exploring the
answer to the research question number three, the mix method approach is most appropriate method in the context of this study.

4.5.1. Mixed method approach:

To study “field view” as mentioned in third point of ethnoconsumerism methodology (Venkatesh, 1995), mixed method approach was used, as it is a mixture of qualitative and quantitative approach (Greene, 1993). In ethnoconsumerism methodology the field view was limited to visual ethnography and grounded theory. In the present study it has been expanded to include quantitative analysis also.

4.5.1.1. Qualitative and Quantitative distinction:

A major classification of research traditions is based on: qualitative and quantitative methods (Williams, 1992). The main focus of qualitative approach is on “building a complex, holistic picture, formed with words, reporting detailed views of informants, conducted in a natural setting” (Antonakis, et. al., 2004). Although qualitative research provides rich information in natural setting, it has often been criticized for being biased. Being constructive in nature, the data collected in qualitative research can be used to construct multiple realities and observer may see evidence which he or she is looking for; even though contrary evidence may also be present.

Quantitative methods are utilized when the phenomenon under study needs to be measured, and hypotheses need to be tested.

4.5.1.1.1. Qualitative approach:

In the present research work ethnographic approach (Atkinson, 1990; Boyle, 1994; Malinowski, 1992) and interpretive approach have been used (Anderson, 1986; Spiggle, 1994) to study the store choice behaviour of six ethnic groups. The interpretive approach has been used not only for generalization but also to gain contextual meanings. The objective is to gather in-depth knowledge of subjects under study. To achieve this objective Greetz (1973) “thick description” approach was used. The data were collected
through repeated participant observation and long qualitative interviews (McCracken, 1988).

4.5.1.1.2. Quantitative approach:

After model development, conceptual framework was tested with Exploratory Factor Analysis (EFA) and later run on Confirmatory Factor Analysis (CFA).

4.6. Ethnoconsumerism:

It is used as a theory and methodological approach to study consumption which itself represent as cultural behaviour. Ethnoconsumerism incorporates ethnography not only from the perspective of data collection, but also includes methods like visual and textual analysis, which is more superior approach to study culture (Meamber and Venkatesh, 2000). Ethnoconsumerism focuses on consumption form the point of social or cultural groups. It examines behaviour through cultural realities of that group. It considers basic cultural categories of a culture like its “actions, practices, words, thoughts, language, institutions and the interconnection between these categories” (Venkatesh, 1995). Such categories exist in every culture and have their own meanings that differentiate these cross cultural categories in basic ways. Rabinow and Sullivan (1987) described the intangibility in Balinese cockfight, where the social and cultural aspects of Balinese society are used to understand the importance of Balinese cockfight. Ethnoconsumerism not only focuses on native view but simultaneously understands the origin of knowledge which a native gathers from its cultural view. Ethnoconsumerism also studies consumer behaviour through socio-cultural phenomena, and predicts that individual behaviour which is studied at individual level for epistemological convenience, basically originates from socio-cultural environment (Douglas and Isherwood, 1979; McCracken, 1988; Sahlins, 1976), from where we can get intuitive sense of the individual. Because learning an individual at individualistic psychological level (learning restricted at individual grasping capacity) has no meaning unless his collective nature toward his socio-cultural environment is studied, this includes culture, family and group norms (Douglas and Isherwood, 1979; McCracken, 1988).
Culture is the main framework under which all social organizations, human communities and individuals develop and change as culture changes on its own. Postmodern-Post industrial era defines culture as a mix of economy, education, institutions, symbolic systems, government, family, production, ideology and consumption. The culture lies in the mind of people and its change and consistency depends on the person who follows it, sometimes it changes rapidly and sometimes very slowly (Firat and Venkatesh, 1994). Culture develops in a holistic way and has many socially developed internal evolutions or external impositions, and it includes the clarification of meanings and values implicit in a particular way of life. It comprises various aspects which vary from “religion to everyday practices, from mundane to profound, from institutions to ideologies, from ideas to activities, and from social formations to meaning systems” (McCracken, 1988; Williams, 1981 cited in Venkatesh, 1995). Hall (1997) defines culture as a system of production and exchange of meanings, and shifting networks of significance between the members of social group or society.

Meta signals arise by looking at and interpreting the consequences of actions of others. Gender signals are imposed on child by the society in which it lives. Boys will be given clothes, hairstyles, toys, ornaments, pastimes and sports different from girls. Society prepares them for the future. This trend widens the gender gap and prepares males to behave in a socially masculine and females in a socially feminine way (Morris, 2002). Satyman and Deshpande (1989) and Zmud and Arce (1992) use ethnicity as a social psychological-demographic construct, in which ethnicity is used as independent construct and consumption as a dependent variable. But in these studies ethnicity is considered just like demographic variables, such as disposable income or household size. But the age criteria of demographic factor makes ethnicity special in understanding the behaviour of different ethnic groups and their consumption patterns, because the ethnic studies focus on the relationship between ethnic and dominant group.

4.6.1. Why Ethnoconsumerism:

Majority of the studies done on the basis of American theory of knowledge do not contribute to the cultural ground realities of the subject and theoretical contexts. Vantetesh (1995) proposes a framework, which he calls ethnoconsumerism to study
consumer behaviour in different cultures, which he gets from the concept of ethno-sociology described by Marriott (1990), but is applicable in other contexts as well. If we consider the work of Yau (1988) who described the cultural values and belief system of Chinese and how they relate the success and failure of the product to themselves, and the work of Belk and Pollay (1988) and Pollay (1986, 1988) who describe the cultural values of Americans which are derived from analyzing 60 year old advertisements; one can conclude as how these cultural values relate to ethnoconsumerism, and we can also apply these values in cross-cultural studies without bias to the question of culture.

If we apply cross-cultural studies of caste system in Bali whose culture is derived from Sanskritic culture of India, it does not work but it works very well in India (Howe, 1987). Arnould (1989) studied Nigerian culture to understand innovation diffusion and preference formation by applying the framework of Gantigon and Robertson’s (1985) framework, conclusion which comes after indepth analysis of socio-cultural and historical analysis of consumption in Zinder, it was predicted that most of the Western constructs do not work in alternative constructs. Arnould (1989) discussed the adoption of two wheelers in India. He first describes the adoption of technology in Indian scenario and then discusses the native meaning provided to scooters which comes as utilitarian in nature and which is quite different from other nations cultural meanings regarding two wheelers.

Venkatesh (1995) uses the concept of Holy (1987) and describes the research process in three ways: description, comparison, and generalization. Description simply talks about facts which are observed and gathered by researchers and it includes interpretation. Comparison is a logical extension of description, which does comparison between two or more cultures. Finally, generalization happens when the researchers have valid generalization across cultures, and the same has been used in the present study.

4.6.2. Assumptions of Ethnoconsumerist research:

As highlighted by Douglas and Isherwood (1979) and McCracken (1988), the consumer behaviour is included in and flows from culture, and cultural categories are combination of current practices, historical and social forces, and they are continuously
undergoing fusion and fission in themselves. So, consumer behaviour is a combined form of visuals, texts and symbols, and these schemes represent the consumer understanding of their environment. Symbols are social images of culture, which constitute, interpret and negotiate the sense-making process adopted by individuals. Accordingly, consumers should be treated as objects in order to understand the symbolic and narrative cultural consumption patterns by consumers (Venkatesh, 1995b). Sometimes, cultures which look similar in terms of language have different historical backgrounds, and every culture has different meanings attached to otherwise similar things, and even in a collective society there is ample space for an individual to identify with individualist identity. The ethnoconsumerist methodology defines ethnoconsumerism approach in nine steps Venkatesh, et. al., (2000). This approach is a mix of text and field work. The text defines the historical-socio-cultural themes. The cultural categories give depth and direction to data analysis and theoretical sources. The relationship of these categories exposes many layers of meanings (Spiggle, 1994). The main aim of the ethnoconsumerism is theory development for the target culture. The text and field provide the basis of cultural framework, which leads to the formation of cultural categories, and finally the interpretation and relation of these categories.

For similarities in groups: Positivism has two approaches (a) scientific generalization, and (b) structuralism-functionalism. In the present study, second approach has been applied which says that world is an organized system having various parts with different functional capabilities but have common systemic goals.

For differences in groups: Subjectivist-interpretivist focuses emphasis on cultures and not on similarities, and stresses that theoretical categories are common for cross-cultural research, but not for generalization.

4.6.3. Ethnoconsumerism Guidelines:

Appadurai (1990) described that companies try to homogenize the world, but culture aims at heterogeneity of the world, therefore, it is better to do comparative description of intra-cultures, instead of generalization. The steps involved in ethnoconsumerism approach are:
1. Identify the working cultural framework.
2. Form the cultural framework, derive cultural categories.
3. Interpret and provide meanings to cultural categories.
4. Establish relationships between cultural categories.
5. Identify and investigate relevant cultural practices and pertinent socioeconomic trends.
6. Identify relevant cultural objects and establish meanings.
7. Describe the consumer environment of interest and specific consumer behaviors. Interpret both the consumer environments and behaviors using the categories and their meanings.
8. Interpret findings in a way that the reader understands as ultimately the interpretation is based on researcher's own perspective.

(Venkatesh, 1995)

A cultural framework represents theoretical concepts which are based on cultural categories derived from field and texts. The field description represents the subject view of culture in real terms and texts take support of socio-cultural and historical themes. Ethnoconsumerism relies on both of the perspectives to validate the finding of research in cross-cultural context (Venkatesh, 1995).

4.6.4. Ethnoconsumerism methodology:

Previous researchers have given concept of market oriented ethnography to formulate market strategy decisions (Arnould and Wallendorf, 1994). They link theory with qualitative domains (Spiggle, 1994) by observing cultural categories through collecting data in field and by depending on interviews (Applbaum and Jordt, 1996). Ethnoconsumerism focuses on cross-cultural studies, but it does not mean to lead to comparisons for generalisations, because every cultural practice is unique and should not be put under universalism. Venkatesh (2013) described the ethnoconsumerist methodological approach for NANO car in India by the use of research publications, public sourcing and press clippings.
In ethnoconsumerism at least two different cultures are required. It is a method of generating and testing hypotheses derived from the positivistic paradigms (Hofstede, 1980). Cross-cultural research studies cultural, societal, social structural and individual behaviours.

Figure 4.1 Ethnoconsumerism Methodology.

Various researchers, like, Whiting and Whiting (1975), Triandis and Lambert (1980), Berry, et. al., (1992) and Hofstede (1980) have done cross-cultural psychological studies. In psychology studies the main criteria is to understand individual’s psychological behaviour, which is influenced by his cultural factors. Ralph Linton (1945) described the concept of model personality in cross cultural studies, which depicts social interaction of an individual and predicts that individual identity gets depicted by his culture. Durkheim (1965) described that individuals are collective conscious and share environment of experiences, events and meanings. For a number of years most of the research was focused on consumer choice behaviours and it included certain variables to understand their behaviour, which at operative level turns into consumption behaviour. But to understand consumer behaviour one has to learn the culture, history and language of target subject. The ethnoconsumerist study can be done through a number of ways, like, quantitative modelling, ethnography, visual ethnography, long interviews and participant observation (Arnould, 1998 cited in Venkatesh, et. al., 2000). It also uses for conceptual framing, theory development and testing; and theory has to pass through the process of universalization to particular conceptual theme. The ethnoconsumerism conceptualizes that consumer consumption behaviour depends not only on his psychological motivation, but also on his cultural background. As it continues diffusion and fusion of cultures, it is important to study not only the intra-culture but also the inter-culture behaviour. Some researchers use culture as a conceptual force by using reductionist approach to culture based on binary scale (Hofstede, 1980) while others use it as just one variable.

But few researches, like, Belk, et. al., (1989) use naturalistic methodology to define consumption as sacred and profane in consumer social life and use most of the methods of qualitative research, Arnould and Wallendorf (1994) describe market oriented ethnography, Spiggle (1994) finds linkage between theory and empirical domains in qualitative approaches, Applebaum and Jordt (1996) use cultural categories as conceptual framework to know the cross-culture consumer behaviour, and they are the ones who gave importance to culture more than just a variable. So, all the four studies are treated as background foundation for
building ethnoconsumerism approach to study cultural and cross-cultural consumer behaviour.

4.7. **Grounded theory approach:**

Grounded theory has marked its presence in marketing and consumer research (Pettigrew, 2000) like sacred and profane in consumer behaviour (Belk, *et. al.*, 1989). It is also used in advertising and mass media (Burchill and Fine, 1997), product development (De la Cuesta, 1994), health care consumption practices (Houston and Venkatesh, 1996), social marketing, ethical marketing, and consumer experience related to museums (Goulding, 2000b). The grounded theory has strong relation with symbolic interactionism, which focuses on reflexive interaction. The symbolic interaction depicts that consumer behaviour social interactions are symbolic in nature. The symbols are in the form of verbal and non-verbal signs (Schwandt, 1994). The assumption which emerged in grounded theory was supported by literature, which is an iterative, inductive and interactional process in the interpretation of data. Moreover, the researcher cannot enter the field empty minded as his interpretation is based on his life experiences and readings (Glaser and Strauss, 1967). The information collected is analyzed through open coding techniques and by looking for words and sentences, which help the researcher to identify main concepts. The researcher collects data from the field until saturation occurs or when no additional information occurs from the field. Glaser (1978) explains grounded theory as “Grounded theory method although uniquely suited to field work and qualitative data, can be easily used as a general method of analysis with any form of data collection: survey, experiment, case study. Further, it can combine and integrate them. It transcends specific data collection methods” (Cited in Goulding, 2005).

The process of grounded theory involves axial coding, which develops and links the core constructs with other related constructs or concepts which at collective level explains concept, theory or phenomenon. The theory developed should have relevance and integration with existing theories to present relevance fit for extension (Glaser and Strauss, 1967).
4.8. **Ethnography:**

Ethnography means to acquire the knowledge regarding the ways of life of a group of people as is undertaken and understood by that native group. This is achieved by understanding the ideas of the local masses regarding the subject matter and its impact in their life so as to ascertain their perception regarding their environment (Malinowski, 1922). This is the process of learning from the local people as to how do they feel about the world around them and the prevalent activities of life which they perform though it may appear to be different to us. This is a process of learning from the people while being one among them.

While interacting with the natives in a manner which is akin to their habits and environment, despite the barrier of language between them, a feeling of togetherness and oneness generates in an atmosphere where they feel confided with the warm feelings of attachment with the similarly situated conditions that flow in the minds of the natives to acquaint the other with the names and vocabulary regarding their environment so as to initiate the conversation and exchange their feelings. This is the situation where the researcher gets a chance to have the glimpse of a handful of new and unexplored ways of life. The understanding regarding the birds, animals, plants, love, marriage and rituals carries almost the same meaning to all human beings but ethnography carries the idea in knowing how the local people understand the world around them and how do these things relate to them. While living in that atmosphere and intermingling with the locals, observations can safely be made regarding the people and environment but ethnography is to understand what feelings do the locals generate with you putting up in that atmosphere under the given conditions. It is not the feeling regarding the things and places observed while being in a particular place or situation but it is the feeling of the locals regarding that very place and situation and the importance of those things to them (Thomas, 1958).
4.8.1. Ethnography approach:

The ethnography approach has a strong relation with cultural anthropology; its focus is to unearth the development process of culture. The ethnographer’s work is to look beyond the common understanding of culture. Every society’s material possession behaviour has its meaning in social symbols, which can be viewed through cultural communication (Pettigrew, 2000). Sometimes, ethnographers have to look at the society through social or cultural lens rather than cognitive or behavioural aspect (Arnould, 1998). The consumer lifestyle is embedded in its subculture or cultural norms (Stebbins, 1997). In ethnography study, it is considered that ethnographer is part of the society under study (Boyle, 1994). The data interpretation does not depend on the face value, but is based on various inferences, reasoning, and studies which fit with the emerging interpretation (Borman and Preissle-Goez, 1986). This is done through content analysis, in which each word or phrase in text is categorized by labels. The text is fragmented into various sub-themes which are related to the main theme (Morse, 1994). Arnould (1998) described ethnography in consumer research, which includes various steps explained below as:

1. Ethnography should aim to explain the ways that culture constructs and is constructed by the behaviours and experiences of its members.
2. Ethnography involves prolonged participation within a specific culture or sub-culture.
3. Ethnography in consumer research tends to be particularistic rather than generalisable, espousing pluralistic accounts of consumption.
4. The potential for ethnography lies in applying multiple data collection methods at a single phenomenon. These may range from surveys to observational data, video tapes, photographs and recordings of speech in action.
5. Ethnography requires tactics for presenting research findings. These presentations should aim to unravel the layered meanings that marketing activities hold for the consumer.

(Cited in Goulding, 2005)
4.8.2. Ethnographic process:

4.8.2.1. Locating Participants:

The interview conducted by the ethnographer has a direct impact of personalities of the ethnographer and the informant. The ethnographer has to act as a student and learn from the experiences of the informant rather than being talkative and indulging in his own ideas and putting words in the mouth of the informant. In such interviews, after a couple of sessions, it is found difficult to maintain a productive relationship with the informant.

Enculturation is the natural process of learning a particular culture. The informants who know their culture well, are termed as good informants, as such, the level of enculturation depends on the degree of knowledge of the informant regarding his own culture. The continuous practice of the routine work improves the level of efficiency which is directly proportional to the refined understanding of the informant.

In order to get a good sample size, the purposive was used to trace participants. Purposive sampling is considered as a non-probability sampling which plays an important role in identifying primary participants. The sample collected is based on researcher’s judgment and by considering the objectivity of the research (Babbie, 1995; Greig and Tylor, 1999), and asking questions from respondents who have knowledge of the phenomena under study (Giorgi, 2006). The original groups of purposive sample respondents were requested to suggest the names and contact details of members of the same or other ethnic groups. In the present study, sample size of 38 respondents was taken; out of which six respondents from five ethnic groups (Mahajan, Muslim, Rajput, Kashmiri Pandit, Sikh) and eight respondents from Sharma ethnic group were selected. The interview session would last till it reached a stage where respondents would become silent and had no more input to add to the information already given by them during the course of interview.
4.8.3. Ethnographic Interviews:

A friendly and casual conversation with the informants is the source of information for the skilled ethnographer who exercises care in introducing a few ethnographic questions in his discussion and observes the responses of the informants in a most casual manner.

In the present study, the interviews were conducted at the home of all six ethnic groups (Mahajan, Muslim, Rajput, Kashmiri Pandit, Sharma, Sikh). Four sessions of two to three hours each were conducted with each member of all six ethnic groups. During a series of such interviews, the ethnographer slowly and gradually introduces new ethnographic elements to assist the informants to give information on a series of points without making the interview a formal interrogation. Such friendly conversations go a long way in paying dividends in the rapport. Through interviewing ethnographer generates social accounts (Hammersley and Atkinson, 1985). Spardley (1995) determined that ethnographic interviews should be semi-structured informal interviews. The semi-structured interviews impose meaning on subject replies, and deductive reasoning generates from the replies of respondents, and as the interview goes on it allows researcher to follow the interesting comments in greater detail. In the present study, the ethnographic interpretations showed in Appendix 4.2 and the results are converged to draw the constructs. The observations from the ethnographic interviews clears that all ethnic groups (sikhs, muslims, rajput, mahajan, Brahmin, and kashmiri pandit) have same ideology for selecting stores for products like grocery, electronics, and apparel. So, in the questionnaire it is instructed to the respondents that the items (variables) represents notion for grocery, electronics and apparels.

4.8.3.1. Analyzing Ethnographic Interviews:

In ethnographic research a constant feedback is required from stage one to the other. An ethnographer has to follow five tasks in a sequence to be carried out simultaneously. The stages in this process have been enumerated as under:

1. **Selecting a problem:** The ethnography starts with the practice in vogue with the natives to interpret their cultural behaviour and share their experiences. The
The ethnographer has to study the particular set of natives and available literature on them to focus on his ethnographic study.

2. **Collecting cultural data:** The ethnographer has to do the exercise of collecting the data by conducting descriptive discussions and record general observations on the natives and their existing environment.

3. **Analysing cultural data:** The analysis of data collected begins at the very initial stage. There are certain symbols and terms in the cultural data which are required to be identified in the beginning for conducting search with these terms.

4. **Formulating ethnographic analysis:** The ethnographer has to prepare hypotheses on the basis of existing data on cultural studies and his observation of the knowledge of informants about phenomena under study. The ethnographer reframes the hypotheses and goes to the field to collect data in addition to what has been formulated earlier and analyzes it to prepare new hypotheses and repeats the process and stages as required for the purification of data.

5. **Writing the ethnography:** After collection of the details from various sources, the ethnographer has to write down the details of the data so that it is put to ethnographic analysis with a view to seek any information for collecting additional field data. By adhering to such requirements, the refined cultural description will come up at the end of the research.

The ethnographic approach has three elements which are explained as below:

1. **Explicit purpose:** During the interview process the researcher only has a hazy idea about the purpose. When both informant and researcher meet they know that their conversation would lead to somewhere. It is the researcher’s responsibility to take care of the purpose and direction of the interview process. Without being authoritarian, he can easily take control of the direction of interview, and direct the interview purpose to various channels which ultimately leads to the discovery of cultural knowledge of the informant.

2. **Ethnographic explanations:** From first to the last interview, researcher provides explanation to the informant. Sometimes, during the interview process, the
informant behaves as teacher and provides cultural information to the ethnographer. In explanation process there are five types of explanations.

a. **Project explanations:** In this step the ethnographer provides general view of the project. The questions asked to informant are presented to him in such a way that it is easy for him to answer. Like in the present study, the goal was to understand store choice behaviour of consumers. So, the questions started from knowing the store selection criteria of consumers from different ethnic groups “How do you select your store”. The sub-questions were to gather information related to subjective ethnicity “How ethnicity affects your behaviour”, store choice and shopping behaviour “What is your behaviour during shopping”. Later each sub-section of questions is considered thoroughly.

b. **Recording explanations:** In this section, permission is obtained from informant relating to information storing. The information is stored either by writing things down on the paper or stored in a tape recorder, so that it can be used later.

c. **Native language explanations:** In this section, the ethnographer encourages the informant to talk or share information in the native language. So that the informant does not think about the changing of words which he uses in general communication and feels free to talk in general communication language to others. In the present study, the researcher tried to communicate in the native language of six ethnic groups. It was easy for ethnographer to do so, because he is native of the same place where six ethnic groups reside, and the social communication (languages spoken) of the place has been transformed into a mixed language which is understood and spoken by all the ethnic groups.

d. **Interview explanations:** After weeks of interview sessions, the informant understands the need of the study and becomes expert in providing information to the researcher. In this study, at least four interview sessions were conducted with a single informant. After two or three interview sessions, the ethnographer explains the purpose of and the area covered by the study to
the informant so that he is able to explain important terms representing the whole theme when enquired by the ethnographer. At later interview session, the ethnographer asks direct questions to the informant which helps to direct the interview session and reduces formality on informant’s end.

e. **Question explanations:** In this section, it is advisable for the ethnographer to explain the questions to informants, like, “Define your ethnicity”? At times it may be confusing for informant to understand such terms. So, ethnographer has to first explain the term ethnicity and the parameters involved in it to gather accurate information from informant.

3. **Ethnographic Questions:** The ethnographic questions are of various kinds which are mentioned below. It is not necessary for the researcher to use all types of questions in a single study.

a. **Descriptive questions:** The ethnographer should know at least one setting in which the informant carries out routine activities so that the informant is in a position to describe and give correct information concerning the activity he is carrying out. The informant will be in a position to give account of how and why the particular activity is being done and its impact on the surroundings (Frake, 1964).

   Descriptive questions are made to encourage the informant to talk about a specific condition or environment at length in his own native language, which session may last for an hour or so. The basic principle of descriptive question is that “more the length of the question more is the response of the informant.” The length of the question has a direct impact on the thought process of the informant who has to think and re-think before giving information and which he continues to describe at length. When any particular activity is selected for investigation, the ethnographer chooses a specific form of question to engage the informant in discussion. The informant describes the particular activity in words and gestures with all emotions involved in doing or un-doing of that activity. The ethnographer always knows who an informant is and is aware of
the setting to be used in a descriptive question. The descriptive questions are mainly of five types with several sub-types described as under:

**Kinds of descriptive questions:**

1. **Grand Tour Questions**
   - 1.1. Typical Grand Tour Questions
   - 1.2. Specific Grand Tour Questions
   - 1.3. Guided Grand Tour Questions
   - 1.4. Task-Related Grand Tour Questions

2. **Mini Tour Questions**
   - 2.1. Typical Mini Tour Questions
   - 2.2. Specific Mini Tour Questions
   - 2.3. Guided Mini Tour Questions
   - 2.4. Task-Related Mini Tour Questions

3. **Example Questions**

4. **Experience Questions**

5. **Native Language Questions**
   - 5.1. Direct Language Questions
   - 5.2. Hypothetical Interaction Questions
   - 5.3. Typical Sentence Questions

1. **Grand Tour Questions**: These questions are asked at a particular location regarding the prevailing conditions and the existing atmosphere. The ethnographer can seek information from informants regarding their general activities and feelings right from the time they have been placed in the contemporary situation. The native terms used in these discussions regarding the significant features of the cultural scene form basis of the ethnographer’s study.

2. **Mini Tour Questions**: The ethnographer seeks information from the informants regarding a much smaller amount of experience. He picks up a
question which requires the informant to discuss the situation akin to the main
discussion but does not require a larger explanation.

3. **Example questions:** The ethnographer seeks from the informant to discuss a
specific event or a single act. Such questions are integral part of an
ethnographic interview when interwoven with main investigation and these
often lead to the actual happenings or stories which are of interest to the
ethnographer.

4. **Experience Questions:** These are the views of the informant during the
period he was put in a particular situation or condition. No doubt these are
open ended questions which lead the informant away from the routine ones,
yet these questions keep him grossly involved in the discussion.

5. **Native Language questions:** The ethnographer designs such questions to
minimize the informant’s translation efforts. In describing a given cultural
scene the informant is encouraged to use the native terms and phrases so that
the native touch and emotions are well explained and the informant feels at
ease in depicting the real cultural scene.

**b. Structural Questions:** In this section, the ethnographer asks questions to informant
in a sequence. This sequence of questions helps him to understand the domain of
cultural knowledge of informant.

**c. Contrast questions:** In this section, the ethnographer asks question to informant and
cross checks his knowledge related to terms asked, like, “What is the difference between
ethnic groups and ethnicity?”

In the present study, the researcher used experience questions under descriptive
questions category to analyze the experiences of respondent’s relation to his ethnicity,
store choice and shopping behaviour.

**4.8.3.2. Data gathering:**

The specific criterion that we focused on was store choice behaviour of
consumers with particular emphasis on six ethnic groups, which included Muslims,
Sikhs, Kashmiri pundits, Rajputs, Mahajans and Sharmas. Subjective feelings towards
subjective ethnicity, shopping behaviour and store choice were investigated as trait. Our central question was: the role of ethnicity on store choice (i.e., How six ethnic groups selected the stores? Was there any difference in the store selection behaviour of six ethnic groups?). Semi-structured in-depth ethnographic interviews were conducted with 38 respondents from the said six ethnic groups hailing from Jammu urban district. Besides, theoretical saturation from grounded theory was used, which suggests that ethnographer should stop collecting data, when a point of saturation is reached. In interviews the focus is on understanding respondent’s inner thoughts. Moreover, respondents were also encouraged to share their lived experiences in their preferred language. The interviews of each respondent were conducted in four to six sittings spread over three stages.

**Stage one interviews:** In this stage, each participant’s life history, his experiences and preferences towards others and in-group members and about shopping behaviour and store choice were considered. The first stage interview was to gain information about subjects and also about their opinion related to shops and their shopping behavior. Subjects were also asked to tell something related to their past lives. The main aim of this stage was to make subjects understand themselves and recall their past smoothly. The second main aim was to understand the concept of consumer “self” in respondents contemporary life. Participants were encouraged to share information related to their families, friends, and recall their experiences, background and personalities.

**Stage two interviews:** Subjects were asked to emphasize on their shopping experiences, store selection preferences and also their opinion about in-group members and out-group members, *viz.*, “Tell me your opinion about other ethnic groups and about members of your ethnic group”; “Tell me something about your shopping experiences”; “Tell me something about your store selection criteria”. Subjects were asked to describe their emotional, cultural, practical experiences and their preferences towards their ethnic group and self concept. In order to understand the consumer experiences in social context, subjects were asked to describe their relation with in-group and out-group members while shopping at the store. They were free to include examples related to their family and community.
Stage three interviews: Subjects were asked to reflect upon their store selection experiences, what those reflections then meant and was there any change in their thoughts after previous interview. Such reflections interlink subject’s intellectual and emotional experiences, and also connect their lives with store choice and shopping experiences. The ethnographic interviews are attached in Appendix 4.23.

4.8.3.3. Separate interviews and analysis:

Some researchers emphasize on combination of interview and analysis (Miles and Huberman, 1984). But separating data gathering from analysis portion is difficult. Interview should be read immediately after its completion and before going for second session of interview with the same respondent to avoid any bias. It is necessary for the interviewer to always check first interview before going for second interview with the same person. The transcript should be analyzed when all interviews were completed. That process reduced the researcher bias during the process of interviews (Seidman, 1998). The profile of the respondents as shown in Appendix 4.22A.

4.9. Coding of Qualitative Data:

Codes are small labels (Appendix 4.21). In the coding process each unit of text is composed of word, sentence and paragraph. In the initial stage of coding process, under ‘first order coding’ grounded terminology of respondents is shown, under ‘second order coding’ terminology given by respondents is related to theoretical constructs (Gioia and Chittipeddi, 1991). Before the start of interviews no code subsists, the existence of codes starts during the development of coding process. In the initial stage each unit of text is compared with each other, later equally likely unit of text is grouped, and then group were labeled (Glaser and Strauss, 1967). As more concepts developed, similar concepts were merged and the other ones were condensed. Every new code was compared with former code, and later compared with existing literature (Strauss and Corbin, 1998). Later open coding and axial coding were performed to label and describe relationship between constructs. These two are different categories of coding as mentioned below: (as shown in Appendix 4.23).
**Open coding:** In this process, all statements made during the interview or other methods are arranged in relation to the research questions identified. Now the arrangements are assigned codes or categories. In the present study, the statements collected from the interviews were assigned codes so as to complete the process of open coding (shown in Appendix 4.23).

**Axial coding:** In this process, the codes developed in the open coding stage are used as guidance and the qualitative data is revisited to check for additional statements that could fit into already identified codes. Some new codes may also be developed at this stage. This process is known as axial coding. In the present study, the axial coding process along with the open coding process helped in developing the building blocks for moving towards the themes (shown in Appendix 4.23).

**Analysis:** Based on the two stages of coding, it was attempted to look at any emerging pattern or explanation from the codes. This analysis revolved around questions like grouping of few codes into a large set of codes or a general code, sequencing of the codes, and identification of any casual relationship among the codes. In the present study, since the idea was to find out the behavioural elements that contribute towards subjective ethnicity, store choice and shopping behaviour, the analytical process was focused towards arriving at some general conclusion (as shown in Appendix 4.23).

**Selective coding:** At this stage, raw data is read for finding the instances that provide or add to the analysis and elaborate the concepts in a better way. This process calls for looking at the data which is contradictory as well as confirmatory. The whole idea is also centered on avoiding confirmation bias which may arise due to selection of statements that only support the assumptions already made (as shown in Appendix 4.23).

Miles and Huberman (1994) described that “codes are tags or labels for assigning units of meaning to the descriptive or inferential information compiled during a study. Codes are usually attached to ‘chunks’ of varying size words, phrases, sentences or whole paragraphs”. They further described that the codes should have following properties:

- Codes should be valid which means that they need to display accurately what is exactly meant in the research.
• Codes should be mutually exclusive which signifies that they should be distinct and there shall be no overlapping.
• Codes should be exhaustive which means that the amount of relevant set of data should be the part of code and it should encompass an exhaustive content of data.

The entire process of coding of data as explained was adhered to in this study using the qualitative data obtained from interviews.

4.10. **Grounded theory principles:**

Theoretical sampling and theoretical saturation was used as key principles in grounded theory. Theoretical sampling is a technique “to gather relevant data to refine and explain the categories into emerging theory”. It helps the researcher to gather the targeted data, through which the researcher develops coding structure and builds relationship among constructs. Theoretical sampling comes into existence before, during, and after the procedure of collecting data. In the present study the researcher used all three type of data collection under this procedure (1) sampling a variety of six ethnic groups including males and females in the age group ranging from 20 to 30 years; (2) develop an idea which suggests that whom should the researcher interview one after the other; and (3) this stage came when all the interviews were coded and important themes had emerged. In this stage specific codes which pertain to broader categories of “cultural intelligence”, “emotional intelligence”, “culture self”, “practical intelligence”, “ethnic identity,” etc., were considered. These steps help the researcher to focus his attention on important data (Charmaz, 2006).

On the other hand theoretical saturation tells the researchers how much data gathering is enough for the study. In data collection theoretical saturation brings the researcher to a stage where no more respondent’s stories provide any new information, besides constant comparison (Locke, 2001). In the present study, the researcher found that no new code emerged after 34th interview from any of the six ethnic groups. This happening in the interviews provided good support to theoretical saturation.
4.11. Organizing the Data:

The coded data was then organized as per Biddle, *et. al.*, (2001). In this process, the data units such as words, sentences, statements, etc., are grouped or clustered into a common theme. Next, the similar types of units are clubbed together to form the first order themes. Here the units with different meanings are not considered. This process is repeated and the first order themes are again grouped together to arrive at second order themes. This process is repeated till we arrive at a concrete theme. In this analysis process, following the guidance by Frankfort-Nachimas and Nachimas, (2007), many questions such as exploration of the type of behaviour being demonstrated, structure of such behaviour, frequency of it, its reason, consequences, and strategy to deal with such behaviour were asked several times.

**Trustworthiness of the Analysis:**

Following are the models suggested by Holloway and Wheeler (2010) to ensure the trustworthiness of the analysis made:

**Member validation:** In this method, the researcher needs to ask the subject being investigated to look at the analysis and provide his or her comment. They may be asked to make their judgment and critical comments about the findings by providing them the summary of the analysis. We discussed some of the emerging themes with the experts interviewed for their comments on the themes. They mostly agreed with the emerging themes.

**Searching for contradictory explanations:** This method focuses on not entirely centering on the researcher’s explanations and ideas. The analysis should rather also identify and explain the instances from the data that are contradictory in nature to the ideas of the researcher. We did not find much of the textual data contradictory of the explanation.

**Triangulation:** This method calls for combining the analysis of different data sources so as to display the trustworthiness of the analysis. We adopted this method using data obtained from in-depth ethnographic interviews.
Audit trial: The audit trial demands the audit of the entire process including the decisions made by other competent persons. This ensures the reliability of the process as well as of the findings. We took the help of another researcher in this process to ensure reliability of the process and finding of our study.

Reflexivity: This method requires that the researchers should critically analyze their own role in the entire data collection process and any probable influence on the findings due to their role. There was no such issue of reflexivity in this study.

All these methods were followed in order to ensure and enhance the trustworthiness of the findings. For ensuring member validation, the findings were discussed with a few of subjects investigated in the process and they were mostly in through the process of coding and analysis. The sources of data from in-depth ethnography interview were combined and checked for emerging themes. The triangulation was ensured in this manner. The entire process was administered to checking by another competent researcher who helped in auditing the entire process of coding and analysis. The concern over the issue of reflexivity was also taken care of.

Overall view: The researcher maintained the trustworthiness of data, and each guideline was followed as per prescribed standards and each ethical practice were given full consideration (Seidman, 1998), and privacy of all the subjects was maintained throughout. Experts took care of the credibility of researcher’s interpretation of the stories, and they also helped in peer debriefings. A number of stories were gathered from respondents at different times, and their interpretations were triangulated to maintain objectivity of the transcription.

4.12. Marking, studying and reducing the text:

Thousands of words contained in a vast number of pages were reduced into important words of interest (McCracken, 1998; Miles and Huberman, 1984; Wolcott, 1990). The process of data reduction was done inductively (Seidman, 1998). Hypotheses and theory development does not address while handling the data (Glaser and Strauss, 1967).
It is considered that a researcher should enter interview state with an empty mind (Meyer and Rowan, 1991). The responses given by respondent to text are basically the interaction which happens between reader and text (Fish, 1980; Rosenblatt, 1982). It is the duty of researcher to check whether the subject is in a state of anger, bias or prejudice. The researcher should be flexible enough in writing transcribed material, so that, interview speaks for itself. Important passages are marked and the process of text reduction happens in relation to research question. At the end of transcription process, important audio transcriptions are placed horizontally. Redundancies are removed and common themes are grouped, and merged until unique themes are left, and this process is referred to as phenomenological reduction. During the entire process of transcription, personal judgments are captured, particularly which are significant. In the transcription reduction process, researchers interpret objects subjectively and make meanings out of it (Seidman, 1998). After the transcription, the subjects were asked to check the important marked passages. That process helped to maintain the validity and importance, but subjects’ valuable suggestions were not considered as a substitute for compromising researchers’ judgment (Lightfoot, 1983). The researcher through his experience and valuable knowledge on the topic, helped to find out important component of the study (Marchall, 1981). Sometimes, respondents were not capable enough to maintain the validity of their responses. In that case bracketing of data technique was used. The bracketing technique suspended the assumptions during the interview process, and the researcher bracketed the relevant information obtained from participants and left their expectations, experiences and theories aside. During the analysis of the data it was required to do bracketing to maintain originality of the data.

In the present study, conceptualization of data happened in two stages: 1) case by case: major themes related to store choice, shopping behaviour and subjective ethnicity were described; 2) across cases: where valuable experiences of the subjects were considered. The study objectives followed by analytical approach provided help to develop a new theory. The current study follows grounded theory guidelines (Strauss and Corbin, 1990). From transcription many categories emerged and to support those categories the literature was repeatedly reviewed (Fournier, 1998). To preserve key points, open coding was done, which included uncovering and identifying relevant
passages that supported the explanation of store choice, shopping behaviour and subjective ethnicity. Hundred and ninety different ideas (items) emerged from the data collected and there after coding was done on hundred fifty one ideas (Crichton and Childs, 2005). Different linkages were developed to interlink categories and themes (Seidman, 1998). The passages which emerged from recordings and transcripts were connected to one another and marked as relevant (Kvale, 1996). Three other experts were recruited and requested to provide their valuable reviews, and their expert knowledge helped to reduce the number of categories from 190 to 151 (items). After this process axial coding was done which provided the thematic ideas related to subjective ethnicity, shopping behaviour and store choice. Later the categories were clubbed together as per the rules of domain analysis (Spradley, 1980).

**Data reduction:**

This process requires the reduction and organization of the amount of data obtained by means of interview and other techniques. The data obtained from interviews were reduced using the process of coding. All necessary pieces of information were collected at one place and irrelevant information was separated.

Data display: In line with recommendation of Miles and Huberman (1994), data in the form of emerging sub-themes were arranged in tabular form for the display purpose. This helped in drawing conclusions form the vast amount of available textual data. This was repeated several times leading to generation of first order codes and subsequent higher level codes.

**Data analysis:**

The researcher used thematic analysis for the present study. It provides an opportunity to find relevant themes from large amount of text. The themes are generated from the data. The technique used shows the cumulative importance and interrelation among the themes. A theme is a composition of meanings, summary of notions, which help to explain the phenomena under study (Van Manen, 1990).

**Data sorting:**
Permission was obtained from subjects to audio-record all thirty eight interviews with a voice recorder (Arkley and Knight, 1999; Bailey, 1996). The interviews were saved with codes (26 August 2013). After the completion of each interview, the researcher made notes from audio-recordings. The interviews were transcribed word by word, and written down in sentences and in paragraphs.

**Data cleanliness:**

Out of the 800 questionnaires distributed, a total of 783 usable questionnaires were collected, yielding a 97.87% response rate. Missing values and outliers were properly examined; errors were reduced systematically and purified. The missing values problems were solved by listwise procedures.

**Combining Ethnography with Quantitative Research:**

It is not correct if one thinks that ethnography as totally an ethnographic technique. It is very common for ethnographers to employ quantitative research methods in their study. The one reason out of many for using quantitative analysis is to cross check the findings and to glean information on the issue which suits well with ethnography context (Bryman, 2001). Whyte (1943) mixed ethnographic study with quantitative analysis, and found amazing analysis from the combination of these two techniques.

The positivism approach does not care about subjective experiences or feelings lies in social scientific knowledge (Topping, 2006). It does manipulation of variables and assessment of the effects on other variables. This method can easily do causal relationships and also does generalizations on the basis of universal laws. The naturalistic paradigm allows researchers to study consumer behaviour in natural state. The naturalistic approach provides opportunity to researchers to interpret real perception of person behaviour. The social world cannot be understood through universal laws. The person behaviour depends on beliefs, values and motives. At the same moment a physical stimulus develop different sense in different people. Sometimes, it also happen that same thing means different to same person at different times (Hammersley and Atkinson, 2007). We should not try to understand objectivity through realism approach only, but
through anti-realism also which states that there are multiple social realities that is sometimes negotiated by individuals as they try to make sense of their experiences (Guba and Lincoln, 1994). In the beginning of the methodology the researcher tries to adopt subtle realism approach (Hammersley, 1992) and later develop realism through subtle realism. The realist ontology assumes that there is a “single unequivocal social reality” (Murphy et al., 1998). The anti-realist believes that there is no absolute truth, the researcher’s version of the world is one reality among others. This is usually filtered through researcher social class and ethnicity. In realist approach there are very less chances of getting objective observation of social reality (Denzin and Lincoln, 1994). The main objective of subtle realism is uncovered reality rather than truth. The knowledge gather by the researcher is provisional and should not define through beliefs whose validity is known with certainty (Hammersley, 1992). The researcher confidence should be based on plausibility and credibility of knowledge claims. The subtle realism believes that phenomena under study are independent of researcher’s claims, and the interpretation of the study should be based on reality. The subtle realism believes that reality cannot be directly access, but can judged through views, beliefs, and behaviours provide information about phenomenon under study (Mays and Pope, 2000). The subtle realism held together both qualitative and quantitative approaches. In order to grasp the whole truth the researcher has to understand the truth of the situation (Gerrish, 2003).
4.13 Scale Development

**Conceptualization**
Develop a Conceptual Definition of the Construct

**Development of Measures**
Generate Items to Represent the Construct

Assess the Content Validity Of the Items

**Model Specification**
Formally Specify the Measurement Model

**Scale Evaluation and Refinement**
Collect Data to Conduct Pretest

Scale Purification and Refinement

**Validation**
Gather Data from New Sample and Reexamine Scale Properties

Assess Scale Validity

Cross-Validate the Scale

**Norm Development**
Develop Norms for the Scale

**Figure 1** Overview of Scale Development Procedure
The scale development procedure is taken from Mackenzie, Podsakoff, Podsakoff (2011).

**Step 1: Develop a Conceptual Definition of the Construct**

A construct is abstract and latent. It is not an observable dimension of behaviour. The first step in scale development is clear understanding of conceptual domain of the construct. In this stage two things are important (a) what construct conceptually capture, (b) how construct differ from other related constructs (Nunnally and Bernstein, 1994; Schwab, 1980; Spector, 1992). The theme of the construct is unambiguous and consistent with prior research (MacKenzie, 2003).

**Subjective Ethnicity interaction with its antecedents**

The subjectivity talks about sub-conscious mind of the person (Murphy, 2010). The Ethnicity has three related components which include: (a) ancestry- trust in single kinship, (b) culture- which determines symbols and practices, and (c) collective events- remembered by group members (Brubaker, et. al., 2007). Dillard, et. al., (2002) studied consumer shopping orientation and store format preference, by using ethnicity as an indicator of consumption behavior. The information acquisition process might work in conscious or sub-conscious mind (Xia and Monroe, 2005). In the present study, the main intention of relating ethnicity with subjectively, is to understand, the degree of retention of ethnicity related values and aspects in consumer subconscious mind, which evoked automatically, whenever the consumer is in any type of interaction, whether materialistic or immaterialistic. The ethnicity is also considered as a subjective phenomenon. The subjective notion in ethnic group membership lies in one’s feelings and in complex cognitive notion of his identity. Subjective ethnicity considers subjectivity as a socio-psychological perception of in-group members and out-group members. The subjectivity in ethnicity also considers objectivity in it. The difference between the two is direct (objective which includes kinship, institutions and descents) and in-direct (subjective which includes attitudes and values) approach to measure ethnicity (Isajiw, 1993). Barth (1969) work on ethnic boundaries influences both subjective and objective ethnicity. Barth considered that ethnic boundaries are psychological perception build in the mind of ethnic group members through their
learned subjectivities from their ethnic group norms rather than because of objectively different cultures. The social-psychological boundaries exists in both in-group and out-group members. The subjective identity in a person develops a feeling of obligation or loyalty toward the group, like the importance of teaching ethnic language to newly born ethnic group members, marrying children with in one’s ethnic group or helping person of same ethnic group in finding jobs. The retention of subjectivity varies among generations for in-group and out-group members. The variation in subjective components causes variation in subjective approach adopted by members of ethnic groups named as ritualistic ethnic identity (high in practicing ethnic traditions and have low feeling of obligation), ideological identity (high feeling of obligation and low in practicing ethnic traditions), rebelling identity (weak image toward ethnic group and high awareness toward ethnic ancestry), ethnic rediscovery (strong image toward ancestral group and high practice of selected tradition by consecutive generation), and fringe identity (strong image toward selected tradition practicing occasionally and have low feeling of obligation). The subjective aspects of ethnicity are meaning reactions originate through objective facts. In each generation there is a tendency of negotiation between subjective and objective aspects of ethnicity (Isajiw, 1993).

In the present study, the main theme and sub-themes related to subjective ethnicity is developed through ethnographic quotations (as shown in Appendix 4.23). The quotations, main theme and sub-themes are evaluated and authensized by experts (Sartori, 1984). The subjective ethnicity focuses on consumer’s perceptions, feelings (e.g., attitude, emotion) and thought (e.g., cognitive, value, intention, subjective norms). The entity identity is an important step in focal construct identification (Schwab, 1980).

Next, the researcher has to explain the purpose of the focal construct by depicting its conceptual theme. The each attribute/characteristic contained in the conceptual theme should be common and unique (Mackenzie, et al., 2011). In the present study, the characteristics of subjective and ethnicity are explained in above paragraph.

The concept of subjective ethnicity is stable over time and can be applied to various ethnic groups residing in multi-cultural socities. The importancs of stability is highlighted by other researchers also (Chaplin et al., 1988).
Construct Dimensionality

The antecedents to subjective ethnicity are cultural intelligence, emotional intelligence, practical intelligence, culture-self and ethnic identity. So, we can say that subjective ethnicity is a multi-dimensional construct and have five sub-dimensions.

The two criteria which should be cared of while developing sub-dimensions are: (a) Does the characteristics of the focal construct are distinctive from each other, (b) elimination of any of the sub-dimension significantly effect the conceptualization of the focal construct (Mackenzie, et al., 2011).

Next, the researchers have to understand that if subjective ethnicity is multi-dimensional concept, then its sub-dimensions are whether reflective or formative (Mackenzie, et al., 2011). In the present study, the sub-dimensions of subjective ethnicity (cultural intelligence, emotional intelligence, practical intelligence, culture-self and ethnic identity) are manifestations of a focal construct, and act in a compensatory fashion. This means that a change in each sub-dimension is sufficient to cause a change in the meaning of the focal construct (but it may or may not necessary). In the present study, the constructs are considered as reflective because of their exploratory nature. In the present study, the researcher tries to develop a realistic interpretations of latent variables which implies a reflective model. So, in the present model subjective ethnicity is a real entity and causes the observed variation in the responses to the items used to measure it.

Store Choice interaction with its antecedents

To determine store choice institutional theory and congruity theory (Sirgy, 1985) is adopted in the present study. The institutional theory explains social networks (Granovetter, 1985), and institutional norms contain performative and institutional actions (Arnold, 1999). Both norms might work as subjective and objective criteria (Meyer and Rowan, 1977). Institutional theory describes that service firm and its environment show the institutional norms and task (Arnold et al., 2001). This theory also determines that that every retailer tries to survive in institutional environment built by social actors, and tries to follow institutional norms to enhance its legitimacy (Meyer and Rowan, 1977). Norms help the consumers to determine that services of service firm are
reasonable (DiMaggio and Walter, 1991). Task related norms determine performative actions. In contrast, institutional norms determine institutions cultural and moral demands (Scott, 1987), and also determine institutional economic task environment (Arnold et al., 1996). In retail scenario performative actions determine store attributes like the assortment in the store, price of the products, and convenience of the store. All the mentioned attributes provide economic benefits to the consumer. In case of ethnic community, performative actions determine the economic benefits achieved by consumers by shopping at the store of the same community person, the benefits include price, service to customer, atmosphere of the store (Pan and Zinkhan, 2006), and accessibility (Thang et al., 2003). On the other hand, institutional actions represent consumer ethnic related attributes performed by retailers. To understand ethnic related attributes intercultural accommodation theory was adopted. Speech theory accommodates efforts done by retailers for consumers (Giles et al., 1991). The accommodation can be embedded in intercultural marketing in many ways (Holland and Gentry, 1999). In marketing domain, the intercultural accommodation represents ethnic language, ads, art, cultural symbols (Huang, et al., 2013), locating the outlet near the ethnic community or providing support to the community (Holland and Gentry, 1999). Previous researchers used institutional theory in retail context by using pragmatic and social legitimacy (Bianchi and Arnold, 2004), and others applied this phenomenon on ethnic community, and find out the perceived attractiveness in the mind of consumer towards the retailer, and find out whether the perceived perception turned into non-patronage or patronage intentions (Huang et al., 2013). Legitimacy is gained objectively, but thought subjectively. Legitimacy is a collective social entity. Sometimes organizations do some deviation from individual beliefs, but such deviation goes unnoticed. Legitimacy also enhances organization’s stability and comprehensibility (Suchman, 1995).

In the present study the term social legitimacy turn into perceived sensitivity to ethnic culture and pragmatic legitimacy used as it was used in Huang et al., (2013). On the other hand, perceived self-congruity determines psychological feelings of consumer during shopping in a retail store, and this construct help to determine the compatibility of consumer with the scenario in the retail store. Previously various researchers worked on attitude, perception and purchase decision of consumer which got affected by self-
congruity (Sirgy, 1985; Bosnjak and Rudolph, 2008). Sirgy et al., (2000) proposed that self-congruity put emphasizes on retail patronage. In the present study self-congruity theory is used to evaluate the effect of six ethnic groups on retail store setting as it was done by Huang et al., (2013) on Chinese consumers (single ethnic group). In an ethnically mixed country self-concepts play a significant role, which is similar to the study of Haung et al., (2013) and McGuire et al., (1978). In retail servicescape, if there is congruity between consumer and environment cues which is based on objects, artifacts (Rosenbaum, 2005), ethnicity, verbal and non-verbal cues (Fowler et al., 2007), then it is considered as successful interaction between consumer and retailer. On these observations, it is presumed that environmental cues and ethnic related cues increase compatibility between consumer and retailer. In selecting retail a store consumer ensure the behaviour of the retailer towards consumers of its ethnic group, and also checks the congruity between retailer toward him or her. So, in the present study we have applied the concept of perceived self-congruity (Haung et al., 2013) towards the store selection criteria of six ethnic groups, and their retailer’s perception toward in-group members and out-group members. Institutional semiotics gives meaning to retail artifacts and images (Birtwistle, Clarke and Freathy, 1999), but is different from traditional image research and is of five types. (a) institutional semiotics focused on signage, store layout and merchandise presentation; (b) in the technique of content analysis institutional analysis is similar to traditional image method, for example grounded theory methodology (McDougall and Fry, 1974); (c) identification of meaning which may not be considered by retailer, because consumer might not consider the store in the same way as retailer (Birtwistle, Clarke and Freathy, 1999); (d) identification of content of meaning or image. The traditional techniques focused more on objective perforamative acts (Martineau, 1958), while in contrast, institutional semiotics were concern about symbolic acts, which affect moral and cultural norms considered important by consumers; (e) consumer importance to interpretation derived from institutional semiotics depended on interpretation clarity in consumer mind (Sherry, 1991). The traditional approach depends on characteristics of the retail store, and in institutional semiotics the focus is on social aspects and on the understanding of the researcher (Arnold and Fischer, 1994).
In the present study, the main theme and sub-themes related to store choice is developed through ethnographic quotations (as shown in Appendix 4.23). The concept of store choice is stable over time and can be applied to various ethnic groups residing in multi-cultural societies. The importance of stability is highlighted by other researchers also (Chaplin et al., 1988).

**Construct Dimensionality**

The antecedents to store choice are perceived self congruity, perceived sensitivity to ethnic culture, and pragmatic legitimacy. So we can say that store choice is a multi-dimensional construct and have three sub-dimensions. Each sub-dimension of store choice is distinctive from each other, and elimination of any of the three sub-dimensions significantly affect the conceptualization of the focal construct (as discussed by Mackenzie, et al., 2011).

The store choice is a multi-dimensional construct and its sub-dimensions are reflective and act in a compensatory fashion. All the three sub-dimensions of store choice are exploratory in nature.

This means that a change in each sub-dimension is sufficient to cause a change in the meaning of the focal construct (but it may or may not necessary). In the present study, the constructs are considered as reflective because of their exploratory nature. In the present study, the researcher tries to develop realistic interpretations of latent variables which implies a reflective model. So, in the present model store choice is a real entity and causes the observed variation in the responses to the items used to measure it.

**Shopping behaviour interaction with its antecedents**

Consumers are social in nature and consumption behaviour should be considered in social context, which predicts that social interaction influence on consumer behavioural choices, because consumers look for social ties which shows resemblance in their behaviour with others behaviour (Chung and Fisher, 1999). Wittmayer, et. al., (1994) described that consumer behaviour related to products depends on symbolic and social significance, and this behaviour gets boosted because of consumer cultural
obligations. Nowadays, marketers try to focus on attracting consumer not only through their functional needs but also through other motives (Roy, 1994). The social ties and cultural obligations evoke status consciousness among consumers. The urge to get social acceptance from the society, the need for companion opinion also arises in a multicultural society. Touch develops relational messages and interpretation (Burgeon, 1991). So, consumers prefer the communication in terms of visual, verbal and through touch (Joy, 2006). The importance of touch among consumers arise the need of touch among consumers.

In the present study, the main theme and sub-themes related to shopping behaviour is developed through ethnographic quotations (as shown in Appendix 4.23). The concept of shopping behaviour is stable over time and can be applied to various ethnic groups residing in multi-cultural societies. The importancs of stability is highlighted by other researchers also (Chaplin et al., 1988).

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Step 2: Generate Items to Represent the Construct

After the conceptual definition of the focal constructs, the next step is to develop items that represent the conceptual domain of the construct. Whether, the focal construct is uni-dimensional or multi-dimensional, the main aim of item generation is to generate items which capture all the essence of focal construct. In the present study, items are generated for all sub-dimensions of store choice, shopping behaviour and subjective ethnicity. The principle of generating items is same for all formative and reflective indicators. In developing items care is given to wording, so that it should be simple and precise, and doubled barreled are avoided. The development of items comes through previous literature, deduction from theoretical definition etc. In the present study, the development of items come through ethnographic interviews (as shown in Appendix 4.23)

Step 3: Assess the Content Validity of the Items

After the generation of items for the focal construct, content validity is evaluated. “The two related judgement must be made when assessing content validity (a) Is the individual item representative of an aspect of the content domain of the construct?. (b) Are the items as a set collectively representative of the entire content domain of the construct?.”. In the present study, the content adequacy of new measures is shown in (Appendix 4.21). In content adequacy, the items which are repeated by respondents during ethnographic interview is shown, and the items which are not repeated twice are not taken under consideration. Along with that item means for is also calculated. The respondents have given a choice to range the items on a scale of 1 (not at all) to 5 (completely). 38 respondents are selected for numbering of items. The items in bold and underline were significantly higher than either items on the appropriate dimension (p<.05) as shown (Appendix 4.1 A, Appendix 4.1B.1 to Appendix 4.1 B.4, Appendix 4.1 C to Appendix 4.1 G) (Mackenzie, et al., 2011). Kurtosis and skewness is also measured under content adequacy. The skewness is right skewed and kurtosis is in platykurtic distribution (as shown in Appendix 4.21).

Item Total Statistics:
It shows that how the cronbach values of items gets increases with the deletion of items having weak cronbach value. Item total statistics for Meta cognitive as shown in (Appendix 4.2A), Item total statistics for Cognitive as shown in (Appendix 4.2 C), Item total statistics for Motivational (Appendix 4.2 E), Item total statistics for Behavioural as shown in (Appendix 4.2.G); Item total statistics for Information Acquisition as shown in (Appendix 4.3.A), Item total statistics for Persuasion Knowledge as shown in (Appendix 4.3.C), Item total statistics for Trustworthiness as shown in (Appendix 4.3.E), Item total statistics for Consciousness as shown in (Appendix 4.3.G), Item total statistics for Empathy as shown in (Appendix 4.3.I), Item total statistics for Social communication as shown in (Appendix 4.3.K), Item total statistics for Relationship effect as shown in (4.3.M), Item total statistics for Store familiarity as shown in (Appendix 4.3.O); Item total statistics for Negotiation as shown in (Appendix 4.4.A), Item total statistics for Information search as shown in (Appendix 4.4.C); Item total statistics for Apathy as shown in (Appendix 4.4.E); Item total statistics for Individual self as shown in (Appendix 4.5A); Item total statistics for Collective self as shown in (Appendix 4.5C), Item total statistics for Personal Relationship as shown in (Appendix 4.5.E), Item total statistics for Store relational perspective as shown in (Appendix 4.5G), Item total statistics for Companion relational perspective as shown in (Appendix 4.5.I); Item total statistics for Pride and desire as shown in (Appendix 4.6.A), Item total statistics for Ethnic attachment as shown in (Appendix 4.6.C); Item total statistics for Perceived self congruity as shown in (Appendix (4.7.A), Item total statistics for Pragmatic legitimacy as shown in (Appendix 4.7.C), Item total statistics for Perceived sensitivity to ethnic culture as shown in (Appendix 4.7.E); Item total statistics for Companion opinion as shown in (Appendix 4.8.A); Item total statistics for Need for touch as shown in (Appendix 4.8.C), Item total statistics for Status consciousness as shown in (Appendix 4.8.E).

**Correlation between Items**

The stronger the correlation between items depicts that items belong to same construct. Correlation for Meta cognitive (Appendix 4.2 B), Correlation for Cognitive (Appendix 4.2 D), Correlation for Motivational (Appendix 4.2 F), Correlation for Behavioural (Appendix 4.2.H); Correlation for Information Acquisition (Appendix

**Step 4: Formally Specify the Measurement Model**

In this step, the relationship between the indicators and sub-dimensions and/or focal construct is presented. The scale of measurement “for a first-order construct with multiple or formative indicators can be set (a) by fixing path between the latent construct and one of its indicators at some nonzero value or (b) by fixing the variance of the construct at some nonzero value. In both instances the nonzero value is usually 1.0 to aid in interpretation. The measurement and structural model for subjective ethnicity, store choice and shopping behaviour is shown in Appendix 4.24 A, Appendix 4.24 B and Appendix 4.24 C (All the second order constructs shows that they are reflective in nature along with first order construct).

**Step 5: Collect Data to Conduct Pretest**

After the formulation of the measurement model, it is necessary to conduct psychometric properties of the scale, and then evaluate its convergent, discriminant validity. For exploratory analysis (EFA), it is recommended that the sample size should
range from 3:1 to 10:1 ratio (Catell, 1978; Everitt, 1975). MacCallum et al., (1999) point out that even a sample size ranges from 60 to 100 is enough if communalities are high, and the sample size ranges from 300 to 500 are sufficient when communalities are low. The communality for the whole sample (n=783) is shown in Appendix 4.10, and for pilot sample (n=391) and second sample (n=392) are shown in Appendix 4.10.1 and Appendix 4.10.2. From all the three appendixes it is observed that the values of communalities are high. So, sample size ranges from 60 to 100 for any ethnic group is sufficient to test the results.

Construct validity:

It represents that the items measures are shown the true score in the population (Hair et al., 2013). The value of outer loadings should be greater than 0.50, and if its values is less than 0.50, then the item is deleted. (Cultural Intelligence (Appendix 4.12.1); Emotional intelligence (Appendix 4.13.1); Practical Intelligence (Appendix 4.14.1); Culture self (Appendix 4.15.1); Ethnic identity (Appendix 4.16.1); Shopping behaviour (Appendix 4.17.1); Store choice (Appendix 4.18.1).

Step 6: Scale Purification and Refinement

Various researchers discussed the method of evaluating the newly developed scales, but Bollen (1989) paper is an exception, because it focuses on omission of those items which help to purify the scale.

Item Total Statistics:

It shows that how the cronbach values of items gets increases with the deletion of items having weak cronbach value. Item total statistics for Meta cognitive (Appendix 4.2.A.1); Item total statistics for Cognitive (Appendix 4.2.C.1); Item total statistics for Motivational (Appendix 4.2.E.1); Item total statistics for Behavioural (Appendix 4.2.G.1); Item total statistics for Information Acquisition (Appendix 4.3.A.1); Item total statistics for Persuasion Knowledge (Appendix 4.3.C.1); Item total statistics for Trustworthiness (Appendix 4.3.E.1); Item total statistics for Consciousness (Appendix 4.3.G.1); Item total statistics for Empathy (Appendix 4.3.I.1); Item total statistics for
Social communication (Appendix 4.3.K.1); Item total statistics for Relationship effect (4.3.M.1); Item total statistics for Store familiarity (Appendix 4.3.O.1); Item total statistics for Negotiation (Appendix 4.4.A.1); Item total statistics for Information search (Appendix 4.4.C.1); Item total statistics for Apathy (Appendix 4.4.E.1); Item total statistics for Individual self (Appendix 4.5.A.1); Item total statistics for Collective self (Appendix 4.5.C.1); Item total statistics for Personal Relationship (Appendix 4.5.E.1); Item total statistics for Store relational perspective (Appendix 4.5.G.1); Item total statistics for Companion relational perspective (Appendix 4.5.I.1); Item total statistics for Pride and desire (Appendix 4.6.A.1); Item total statistics for Ethnic attachment (Appendix 4.6.C.1); Item total statistics for Perceived self congruity (Appendix 4.7.A.1); Item total statistics for Pragmatic legitimacy (Appendix 4.7.C.1); Item total statistics for Perceived sensitivity to ethnic culture (Appendix 4.7.E.1); Item total statistics for Companion opinion (Appendix 4.8.A.1); Item total statistics for Need for touch (Appendix 4.8.C.1); Item total statistics for Status consciousness (Appendix 4.8.E.1).

**Correlation between Items**

The stronger the correlation between items depicts that items belong to same construct. Correlation for Meta cognitive (Appendix 4.2.B.1); Correlation for Cognitive (Appendix 4.2.D.1); Correlation for Motivational (Appendix 4.2.F.1); Correlation for Behavioural (Appendix 4.2.H.1); Correlation for Information Acquisition (Appendix 4.3.B.1); Correlation for Persuasion Knowledge (Appendix 4.3.D.1); Correlation for trustworthiness (Appendix 4.3.F.1); Correlation for Consciousness (Appendix 4.3.H.1); Correlation for Empathy (Appendix 4.3.J.1); Correlation for Social communication (Appendix 4.3.L.1); Correlation for Relationship effect (Appendix 4.3.N.1); Correlation for Store familiarity (Appendix 4.3.P.1); Correlation for Negotiation (Appendix 4.4.B.1); Correlation for Information search (Appendix 4.4.D.1); Correlation for Apathy (Appendix 4.4.F.1); Correlation for Individual self (Appendix 4.5.B.1); Correlation for Collective self (Appendix 4.5.D.1); Correlation for Personal relationship (Appendix 4.5.F.1); Correlation for Store relational perspective (Appendix 4.5.H.1); Correlation for Companion relational perspective (Appendix 4.5.J.1); Correlation for Pride and desire (Appendix 4.6.B.1); Correlation for Ethnic attachment (Appendix 4.6.D.1); Correlation
for Perceived self congruity (Appendix 4.7.B.1); Correlation for Pragmatic legitimacy (Appendix 4.7.D.1); Correlation for Perceived sensitivity to ethnic culture (Appendix 4.7.F.1); Correlation for Companion opinion (Appendix 4.8.B.1); Correlation for Need for touch (Appendix 4.8.D.1); Correlation for Status consciousness (Appendix 4.8.F.1).

**Evaluating the Goodness of Fit of the Measurement Model**

For PLS models the GoF value should be in the range of 0 to 1. The more value is closer to 1 the more it is valuable (Tenenhaus et al., 2005). In the pretest sample (n=391), the value of GoF (GoF = \sqrt{Average R^2 \times Average communality}) was 0.589, which is considered as good value (Wetzels et al., 2009).

**Assess Validity of the Set of Indicators at the Construct Level**

Average variance extracted (AVE) shows the convergent validity by estimating the average variance in the indicators related to the focal construct. The value of AVE should be greater than 0.50, because it represents that the majority of the variance is explained by the construct (Fornell and Larcker, 1981). The AVE (n=391) is explained in Appendix 4.11.1 which shows that all the values are above 0.50 value.

**Assessing Reliability of the Set of Indicators at the Construct Level**

The reliability is traditionally used to calculate the internal consistency of the items (Bollen and Lennox, 1991). But, Fornell and Larcker (1981) recommend that internal consistency should also be measured for construct. To calculate reliability at the construct level composite reliability is calculated. All the values calculated for composite reliability should be greater than 0.70 (Netemeyer et al., 2003). In the results all values of composite reliability are greater than 0.70 (as shown in Appendix 4.10.1 for n=391).

**Evaluating Individual Indicator Validity and Reliability**

In the results the reliability for first order, second order, third order, fourth order and fifth order construct is greater than 0.70 (as shown in Appendix 4.10.1 for n=391).

**Convergent Validity**
According to Hair et al., (2013), convergent validity is calculated through main factor loadings ((Cultural Intelligence with KMO (Appendix 4.2.I.1) and factor loadings (Appendix 4.2 J.1)); (Emotional Intelligence (Self awareness with KMO (Appendix 4.3 Q.1) and factor loadings (Appendix 4.3.R.1)), (Self management with KMO (Appendix 4.3.S.1) and factor loadings (Appendix 4.3.T.1)), (Social Awareness with KMO (Appendix 4.3.U.1) and factor loadings (Appendix 4.3.V.1), (Relationship Management with KMO (Appendix 4.3.W.1) and factor loadings (Appendix 4.3.X.1)), (Practical Intelligence with KMO (Appendix 4.4.G.1) and factor loadings (Appendix 4.4.H.1)), (Culture Self with KMO (Appendix 4.5.K.1) and factor loadings (Appendix 4.5.L.1)), (Ethnic Identity with KMO (Appendix 4.6.E.1) and factor loadings (Appendix 4.6.F.1)), (Store choice with KMO (Appendix 4.7.G.1) and factor loadings (Appendix 4.7.H.1), (Shopping Behaviour (Appendix 4.8.G.1), and factor loadings (Appendix 4.8.H.1)); it can also be calculated though composite reliability (as shown in Appendix 4.10.1) and average variance extracted (AVE) as shown in Appendix (4.11.1). The loadings for all the items should be greater than 0.05. Composite reliability should be above 0.70. The correlation between main construct and sub-constructs also show convergent validity, if the value of correlation is greater than 0.5 (Peter, 1981) as shown in Appendix (4.19.1).

Eliminate Problematic Indicators

The weak indicators are eliminated from the list of items from each construct. After the item deletion process in item total statistics, weak items are further deleted in exploratory factor analysis. The weak constructs along with weak items also get deleted (as shown in Appendix 4.9.1 for n=391). After than confirmatory factor analysis is also applied to further check the reliability of the item deletion process (as shown in Appendix 4.10.1 for n=391).

Step 7: Gather Data from New Sample and Reexamine Scale Properties

This process is required after the addition, droppage or rewording of the items or constructs in the purification process, as it helps to reevaluate the measurement model with new data set. In the present study, the new data set is of n=392 respondents.

Item total statistics
It shows that how the cronbach values of items gets increases with the deletion of items having weak cronbach value. Item total statistics for Meta cognitive (Appendix 4.2.A.2); Item total statistics for Cognitive (Appendix 4.2.C.2); Item total statistics for Motivational (Appendix 4.2.E.2); Item total statistics for Behavioural (Appendix 4.2.G.2); Item total statistics for Information Acquisition (Appendix 4.3.A.2); Item total statistics for Persuasion Knowledge (Appendix 4.3.C.2); Item total statistics for Trustworthiness (Appendix 4.3.E.2); Item total statistics for Consciousness (Appendix 4.3.G.2); Item total statistics for Empathy (Appendix 4.3.I.2); Item total statistics for Social communication (Appendix 4.2.K.2); Item total statistics for Relationship effect (4.3.M.2); Item total statistics for Store familiarity (Appendix 4.3.O.2); Item total statistics for Negotiation (Appendix 4.4.A.2); Item total statistics for Information search (Appendix 4.4.C.2); Item total statistics for Apathy (Appendix 4.4.E.2); Item total statistics for Individual self (Appendix 4.5.A.2); Item total statistics for Collective self (Appendix 4.5.C.2); Item total statistics for Personal Relationship (Appendix 4.5.E.2); Item total statistics for Store relational perspective (Appendix 4.5.G.2); Item total statistics for Companion relational perspective (Appendix 4.5.I.2); Item total statistics for Pride and desire (Appendix 4.6.A.2); Item total statistics for Ethnic attachment (Appendix 4.6.C.2); Item total statistics for Perceived self congruity (Appendix 4.7.A.2); Item total statistics for Pragmatic legitimacy (Appendix 4.7.C.2); Item total statistics for Perceived sensitivity to ethnic culture (Appendix 4.7.E.2); Item total statistics for Companion opinion (Appendix 4.8.A.2); Item total statistics for Need for touch (Appendix 4.8.C.2); Item total statistics for Status consciousness (Appendix 4.8.E.2).

**Correlation between Items**

The stronger the correlation between items depicts that items belong to same construct. Correlation for Meta cognitive (Appendix 4.2.B.2); Correlation for Cognitive (Appendix 4.2.D.2); Correlation for Motivational (Appendix 4.2.F.2); Correlation for Behavioural (Appendix 4.2.H.2); Correlation for Information Acquisition (Appendix 4.3.B.2); Correlation for Persuasion Knowledge (Appendix 4.3.D.2); Correlation for trustworthiness (Appendix 4.3.F.2); Correlation for Consciousness (Appendix 4.3.H.2); Correlation for Empathy (Appendix 4.3.J.2); Correlation for Social communication
Construct Validity:

It represents that the items measures are shown the true score in the population (Hair et al., 2013). The value of outer loadings should be greater than 0.50, and if its values is less than 0.50, then the item is deleted. (Cultural Intelligence (Appendix 4.12.2); Emotional intelligence (Appendix 4.13.2); Practical Intelligence (Appendix 4.14.2); Culture self (Appendix 4.15.2); Ethnic identity (Appendix 4.16.2); Shopping behaviour (Appendix 4.17.2); Store choice (Appendix 4.18.2)

Convergent Validity

According to Hair et al., (2013), convergent validity is calculated through main factor loadings ((Cultural Intelligence with KMO (Appendix 4.2.I.2) and factor loadings (Appendix 4.2.J.2); (Emotional Intelligence (Self awareness with KMO (Appendix 4.3.Q.2) and factor loadings (Appendix 4.3R.2)), (Self management with KMO (Appendix 4.3.S.2) and factor loadings (Appendix 4.3T.2)), (Social Awareness with KMO (Appendix 4.3.U.2) and factor loadings (Appendix 4.3.V.2), (Relationship Management with KMO (Appendix 4.3 W2) and factor loadings (Appendix 4.3.X.2),(Practical Intelligence (Negotiation with KMO (Appendix 4.4.G.2) and factor loadings (Appendix 4.4.H.2)), (Culture Self with KMO (Appendix 4.5.K.2) and factor loadings (Appendix 4.5.L.2); Correlation for Relationship effect (Appendix 4.3.N.2); Correlation for Store familiarity (Appendix 4.3.P.2); Correlation for Negotiation (Appendix 4.4.B.2); Correlation for Information search (Appendix 4.4.D.2); Correlation for Apathy (Appendix 4.4.F.2); Correlation for Individual self (Appendix 4.5.B.2); Correlation for Collective self (Appendix 4.5.D.2); Correlation for Personal relationship (Appendix 4.5.F.2); Correlation for Store relational perspective (Appendix 4.5.H.2); Correlation for Companion relational perspective (Appendix 4.5.J.2); Correlation for Pride and desire (Appendix 4.6.B.2); Correlation for Ethnic attachment (Appendix 4.6.D.2); Correlation for Perceived self congruity (Appendix 4.7.B.2); Correlation for Pragmatic legitimacy (Appendix 4.7.D.2); Correlation for Perceived sensitivity to ethnic culture (Appendix 4.7.F.2); Correlation for Companion opinion (Appendix 4.8.B.2); Correlation for Need for touch (Appendix 4.8.D.2); Correlation for Status consciousness (Appendix 4.8.F.2).
loadings (Appendix 4.5.L.2)), (Ethnic Identity with KMO (Appendix 4.6.E.2) and factor loadings (Appendix 4.6.F.2)), (Store choice with KMO (Appendix 4.7.G.2) and factor loadings (Appendix 4.7.H.2), (Shopping Behaviour (Appendix 4.8.G.2), and factor loadings (Appendix 4.8.H.2)) composite reliability (as shown in Appendix 4.10.2) and average variance extracted (AVE) as shown in Appendix (4.11.2). The loadings for all the items should be greater than 0.05. Composite reliability should be above 0.70. The correlation between main construct and sub-constructs also show convergent validity, if the value of correlation is greater than 0.5 (Peter, 1981) as shown in Appendix (4.19.2).

Evaluating the Goodness of Fit of the Measurement Model

For PLS models the GoF value should be in the range of 0 to 1. The more value is closer to 1 the more it is valuable (Tenehaus et al., 2005). In the pretest sample (n=392), the value of GoF (GoF √Average R²*Average communality) was 0.602, which is considered as good value (Wetzels et al., 2009).

Assess Validity of the Set of Indicators at the Construct Level

Average variance extracted (AVE) shows the convergent validity by estimating the average variance in the indicators related to the focal construct. The value of AVE should be greater than 0.50, because it represents that the majority of the variance is explained by the construct (Fornell and Larcker, 1981). The AVE (n=392) is explained in Appendix 4.11.2 which shows that all the values are above 0.50 value.

Assessing Reliability of the Set of Indicators at the Construct Level

The reliability is traditionally used to calculate the internal consistency of the items (Bollen and Lennox, 1991). But, Fornell and Larcker (1981) recommend that internal consistency should also be measured for construct. To calculate reliability at the construct level composite reliability is calculated. All the values calculated for composite reliability should be greater than 0.70 (Netemeyer et al., 2003). In the results all values of composite reliability are greater than 0.70 (as shown in Appendix 4.10.2 for n=392).

Evaluating Individual Indicator Validity and Reliability
In the results the reliability for first order, second order, third order, fourth order and fifth order construct is greater than 0.70 (as shown in Appendix 4.10.2 for n=392).

Eliminate Problematic Indicators

The weak indicators are eliminated from the list of items from each construct. After the item deletion process in item total statistics, weak items are further deleted in exploratory factor analysis. The weak constructs along with weak items also get deleted (as shown in Appendix 4.9.2 for n=392). After than confirmatory factor analysis is also applied to further check the reliability of the item deletion process (as shown in Appendix 4.10.2 for n=392).

Step 8: Assess Scale Validity

In this section the main goal is to evaluate four things (a) “comparing groups known to differ on the construct”, (b) “adequately capture the multidimensional nature of the construct”, (c) “are distinguishable from the indicators of other constructs (discriminant validity)”, (d) “are related to the measures of other constructs specified in the construct’s theoretical network (nomological validity)” (Mackenzie et al., 2011).

Known Group Comparisons

The known group comparison technique is helpful in capturing the phenomenon of interest. “If our understanding of a construct leads us to expect two groups to differ on the test[scale], this expectation may be tested directly (Cronbach and Meehl, 1955). The known group comparison between ethnic groups (as shown in Appendix 4.22 B) shows that there is no difference between ethnic groups. The known group comparison between gender (as shown in Appendix 4.22 C) shows that gender opinion differs for shopping behaviour, store choice (expect pragmatic legitimacy), cultural intelligence, emotional intelligence, practical intelligence, ethnic identity and culture self.

Assess the Nomological and/or Criterion Related Validity

“In addition to establishing the validity of the indicators of the focal construct using the known groups validity method, it is also important to (1) specify the nature of the lawful
relationships between the focal construct and other constructs, and (2) test whether the indicators of the focal construct relate to measures of other constructs in the manner expected” (Mackenzie et al., 2011). The correlation between focal construct and other constructs (as shown in Appendix 4.19 A) shows that the focal construct have good correlation with other constructs. Along with that indicators of the focal construct have good relation with measure of the other constructs.

**Using the Nomological Network to Assess the Validity of the Multidimensional Structure**

The nomological network is helpful in understanding the competence of the multidimensional structure of the focal construct (Edward, 2001). In case of “exogenous multidimensional focal construct having reflective indicators (as the case in present model), this can be done by assessing whether the sub-dimensions of the multidimensional construct have significant direct effects on a consequence over and above the direct effect that focal construct has on the consequence. For both cases, the significance of direct paths can be tested with modification indices, which show the expected improvement in fit if a constrained parameter is freed” (Mackenzie et al., 2011). The present model is subordinate and work as an effect. This as per utility theory, indicates that theoretical model relate each dimension of the construct to other variables within a general nomological network. (Paunonen et al., 1999). “An apparent advantage of combining dimensions is that the association between two general constructs can be index by a single quantity (e.g., a correlation coefficient). However, a single index of association can also be obtained for set of dimensions using set correlation (Cohen, 1982 cited in Edwards, 2001) or multi regression” (Dwyer, 1983). In the present study, correlation coefficients are used to set the model. From the results of trials (Appendix 4.24 C) it is observed that model is reflective in nature, and goodness of fit is higher for reflective constructs. From correlation between sub-constructs and main construct (as shown in Appendix 4.19 A). It is indicated that subjective ethnicity, store choice, and shopping behaviour have stronger relation with their sub-simensions, in comparison to other’s sub-dimensions. The relation between focal construct and its sub-dimensions is statistically significant at 0.05 level, and (a) the relation between focal construct and
other’s sub-dimensions, and (b) the relation between sub-dimensions of one focal construct with sub-dimensions of other focal construct is statistically significant at 0.10 level which is lower at confidence interval in comparison to direct effect of focal construct, which means that the model is perfectly fit.

**Assess Discriminant Validity:**

The divergent validity is represented through F K Test, and its value should not be less than 0.50 (Hair *et al.*, 2013). In the present study it is seen from the results that all the values of the constructs are greater than 0.50 (as shown in Appendix 4.11 (n=783), 4.11.1 (n=391), 4.11.2 (n=392)). Along with that the strength of all the constructs are shown through t-value (as shown in Appendix 4.11 (n=783), 4.11.1 (=391), 4.11.2 (n=392)).

**Step 9: Cross Validate the Scale**

It is necessary to cross validate the psychometric properties of the model using new sample. This step is important for refinement process. The new sample is taken from other chunk of population for which construct is measured. In PLS-SEM the measurement invariance is measured through SRMR (standardized root mean square residual) (Browne *et al.*, 2002).

\[
SRMR = \sqrt{\frac{\sum_{i=1}^{P} \Sigma_{j=1}^{i} [(S_{ij} - \hat{S}_{ij})/(\hat{S}_{ii}\hat{S}_{jj})]^2}{k(k+1)/2}}
\]

Hu and Bentler (1999) recommend that SRMR value should be close to 0.09, it represents reasonable fit for the model. In the Table 4.6, it is clear that the values are greater than 0.05, which indicates good fit of the model (Hu and Bentler, 1999).

<table>
<thead>
<tr>
<th>Dogra Brahmin</th>
<th>Dogra Rajput</th>
<th>Mahajan</th>
<th>Kashmiri Pandit</th>
<th>Sunni Muslim</th>
<th>Poonchi Sikh</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPMR</td>
<td>0.06</td>
<td>0.07</td>
<td>0.05</td>
<td>0.06</td>
<td>0.07</td>
</tr>
</tbody>
</table>
Step 10: Develop Norms for the Scale

In order to get meaning of scores. It is important to understand the distribution of scores in population. “Estimating the population distribution requires administering the scale to a representative sample of members of the population of interest” (Urbina, 2004). In the present study, the population of interest is ethnic groups and gender. So, for the study six major ethnic groups of Jammu district is selected. For gender age group of 18 to 30 years of ethnic groups are selected for the current study. Along with that PLS-SEM also handle the shape of the distribution (Mackenzie, 2011).

4.14. Quantitative analysis:

4.14.1 Data Analysis plan:

Our hypothesized model posits relationship among a set of latent constructs which are measured using multiple manifest variables. To test such a model we have an option of using a two-stage approach of regression analysis or SEM. For this study SEM approach was found to be more suitable as compared to a two-stage approach of regression analysis (i.e., in first stage factor analysis for the measurement model and in stage two regression or path analysis for the structural model) because of several reasons. First, in SEM models there is a simultaneous evaluation of measurement and structural model (Bollen, 1989; Chin, et. al., 1997), which provides number of advantages over the traditional two-stage approach of regression analysis (Chin, 1998a; Fornell, 1987; Tabachnick and Fidell, 2001). A separate estimation of measurement and structural model may result in an invalid estimation because this approach assumes that the relationship between the indicators of a construct is independent of the theoretical context within which the indicators are embedded (Fornell, 1987; Lyttinen and Hirschheim, 1987). Second, SEM approach allows a priori substantive/theoretical testing of measurement assumptions against empirical data (Chin, 1998a, 2003). Third, SEM allows testing the entire system of variables concurrently (Kline and Klammer, 2001). Fourth, in contrast to two stages approach where the specification of mediating structures does not identify the independent and mediating variables explicitly (Ryan, et. al., 1999),
SEM provides the flexibility of handling multiple mediating variables simultaneously (Iacobucci, et. al., 2007). Fifth, in contrast to a two-stage regression analysis which uses a measurement model with simplistic assumption of equally weighted indicators, SEM uses a measurement model with optimized weights of indicators providing a more valid estimation of the measurement model (Goodhue, et. al., 2012; McDonald, 1996). Sixth, our model has eight second-order latent variables, for second order constructs SEM provides a more valid measurement model compared to two stage regression model which assume equal weights of first order latent variable in second order latent variable. In SEM weights of the first order latent variables are estimated as a parameter with an objective of a closer fit between the data and the posited measurement model. Seventh, the SEM methodology allows model refinement through multiple model testing and comparison. Eighth, SEM allows building of second order, and higher order, models which are capable of showing a different dimension as to how constructs can be related. Finally, SEM is confirmatory in nature (Kline and Klammer, 2001).

4.14.2 Sampling:
There are four basic issues which are to be considered in the sampling process: (i) Sampling frame; (ii) data sources; (iii) sample size.

4.14.2.1 Sampling frame:
In Indian context, studies in ethnic groups are very rare and it is hard to find any data in published work related ethnic group’s store choice behaviour. To understand this phenomenon in the context of Jammu, major ethnic groups were considered in this study, to understand store choice behaviour of consumers belonging to different ethnic groups, and an effort was made to analyses the effect of their daily social interaction on their store choice behaviour.

Another concern in this sampling procedure is that it follows a convenience sampling methodology. In this, there is no pattern which is followed in selecting respondents. In a perfect world with unlimited resources it might be possible to conduct this type of study with random sampling of the different ethnic group’s population but that is not always possible. This question was raised in several cases in existing literature and scholars defended convenience sampling due
to some of its merits. Table 4.1 mentions some instances of this defense (as mentioned by Lance and Vanderberg, 2008).

Table 4.2: Merits of convenience sampling

<table>
<thead>
<tr>
<th>Defenses of Convenience Samples</th>
<th>Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Efficiency. Convenience samples are more cost-effective and more responsive than field samples.</td>
<td>Farber, 1952; Kardes, 1996</td>
</tr>
<tr>
<td>Homogeneity. Less noise or extraneous variation associated with homogeneous (convenience) samples.</td>
<td>Berkowitz &amp; Donnerstein, 1982; Conrad, 1946; Greenberg, 1987; Lynch, 1982</td>
</tr>
<tr>
<td>Humanity. “Real-people” samples are a myth; people are people.</td>
<td>Campbell, 1986; Locke, 1986; Stone-Romero, 2002</td>
</tr>
<tr>
<td>Generalizability. Field samples are no more representative, and perhaps even less representative, of typical organizational members.</td>
<td>Dipboye &amp; Flanagan, 1979; Oakes, 1972</td>
</tr>
<tr>
<td>Adequacy. Theories generalize; samples don’t. Any sample encompassed by the theory is appropriate.</td>
<td>Calder, et. al., 1981; Chow, 1997; Dobbins, et. al., 1988; Farber, 1952; Greenberg, 1987; Highhouse, in press; Ilgen, 1986; Kardes, 1996; Mook, 1983</td>
</tr>
</tbody>
</table>

Given that convenience sampling was the most cost effective manner to capture this data, had lesser noise, and our objective to generalize over larger populations, convenience sampling was chosen for this study.
4.14.2.2 Data source:

To ensure that sample is unbiased, ideally the universe of the study should be enumerated, which in this case was the population of major ethnic groups in Jammu region. A cross-sectional survey method was used for data collection. Geographically, the relevant population of our respondents was present all over India but because of cost and time consideration it was decided to conduct this study in Jammu region. Data collection was restricted to Jammu region only to avoid any possible differences due to geography. Data was collected from August 2013 to November 2013 from various wards of Jammu region. Our data collection method was non-probability sampling method due to the absence of availability of published list of ethnic group wise database in census reports.

4.14.2.3 Sample size:

We used PLS-SEM which is a small sample approach. Inappropriate sample size could cause serious problems like convergence issues, improper solutions, accuracy of parameter estimates, small statistical power, and inappropriate model fit statistics. As in any statistical modeling, determination of appropriate sample size is critical to SEM (Wang and Wang, 2012). SEM scholars seemed to be divided on their views on the issue of appropriate sample size in SEM models. Some studies found a support that simple SEM models can be tested at a very small sample (Hoyle, 1999; Hoyle and Kenny, 1999; Marsh and Hau, 1999), but most other studies suggest a minimum sample size of 100-150 for getting meaningful results in SEM (Tinsley and Tinsley, 1987; Anderson and Gerbing, 1988; Ding, et. al., 1995; Tabachnick and Fidell, 2001).

Another approach used for determining sample size is based on the number of observed variables. Bentler and Chou (1987) suggest that when dealing with latent variables with multiple indicators, sample size of 5 cases per variable would be sufficient. Several studies calculate appropriate sample size based on thumb rule of 10 cases/observations per indicator variable (Nunnally, 1967). Number of indicator per latent factors also determines appropriate sample size. There is empirical support that a larger number of observed indicators per latent factor can compensate for small sample size; similarly a larger sample size would be required in case of fewer indicators per factor (Marsh, et. al., 1998; Marsh and Hau, 1999). Roughly a sample size of 50 would be
sufficient for a CFA model which has latent factors with 6-12 indicator variables, but this sample size requirement would increase to at least 100 for a model with latent factors with 3-4 indicators (Boomsma, 1985; Marsh and Hau, 1999). There is an increasing trend of estimating appropriate sample size for SEM model based on power analysis (Wang and Wang, 2012). In these approaches sample size is estimated based on power to be achieved. In PLS-SEM even small sample sizes work very well. The 10 times rule (Barclay, Higgins, and Thompson, 1995) is not required in PLS-SEM. The PLS-SEM demonstrate better results with small sizes than covariance-based SEM (Reinartz et al., 2009). The PLS-SEM provides better convergence results with small samples than covariance-based SEM (Henseler, 2010). The PLS-SEM can even work well “when the number of observations is smaller than the number of variables or the number of parameters in the model. We therefore conclude that PLS can be applied in many instances of small samples when other methods fail” (Henseler et al., 2014).

For the present study the sample size is 783 and ethnic group fragment is listed as follow: Sikh: 110; Dogra Brahmin: 162; Dogra Rajput: 133; Dogra Muslim: 123; Kashmiri Pandits: 101; Mahajan: 154. This was considered appropriate sample size because it is much larger than the minimum sample size criteria of 200 for full model and 100 observations in each group for multi-group model (Kline, 2005). The ethnic groups selected in the study are taken from census 1991, where it was identified that major ethnic groups in Jammu are Dogra Rajput, Dogra Brahmin, Dogra Mahajan, Kashmiri Pandits, Dogra Muslim, Punchi Sikh.

**Jammu Demographics and Sample size selection:**

In census 2011, the population in Jammu municipal corporation area (selected area of study) is 502, 197 people (including male and females). The sample size criteria as shown in Table 4.3 indicates that the required sample for Hindus is 346 (respondents), the sample collected in field from Hindu respondents are 550 which is much higher than the required number. For Muslims the required sample is 29, but the sample collected from the field is 123, which is much higher than the required number. For Sikhs the required
sample is 31, but the sample collected form field is 110, which is much higher than the required number.

Table 4.3 Sample size selection criteria

<table>
<thead>
<tr>
<th>Jammu Census 2011</th>
<th>Population (Individuals)</th>
<th>70% Population from selected major ethnic groups</th>
<th>Avg. literacy rate in 2011 census Jammu</th>
<th>Avg Life expectancy in India 2015</th>
<th>Sample proportion of whole population</th>
<th>Middle class 20% of whole Indian population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hindu (R,B,M,K)</td>
<td>84.27% 423,201</td>
<td>296,241</td>
<td>247,213</td>
<td>34,609</td>
<td>1,730</td>
<td>346</td>
</tr>
<tr>
<td>Muslim (S)</td>
<td>7.03% 35,154</td>
<td>24,608</td>
<td>20,535</td>
<td>2,875</td>
<td>144</td>
<td>29</td>
</tr>
<tr>
<td>Sikh (PS)</td>
<td>7.47% 37,514</td>
<td>26,260</td>
<td>21,914</td>
<td>3,068</td>
<td>153</td>
<td>31</td>
</tr>
<tr>
<td>Note: R= Dogra rajput, B= Dogra Brahmin, M=Mahajan, K=Kashmiri pandit; S= Sunni muslim; PS= Punchi sikh</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

A lower bound for the sample size for a structural equation model can be calculated using the formula:

\[ n = \max(n_1, n_2) \]

where:

\[ n_1 = \left[ 50 \left( \frac{j}{k} \right)^2 - 450 \left( \frac{j}{k} \right) + 1100 \right] \]

\[ n_2 = \frac{1}{2H} \left[ A \left( \frac{\pi}{6} - B + D \right) + H + \sqrt{A \left( \frac{\pi}{6} - B + D \right) + H} \right]^2 + 4AH \left( \frac{\pi}{6} + \sqrt{A + 2B - C - 2D} \right) \]

\[ A = 1 - \rho^2 \]

\[ B = \rho \arcsin \left( \frac{\rho}{2} \right) \]

\[ C = \rho \arcsin (\rho) \]

\[ D = \frac{A}{\sqrt{3} - A} \]

\[ H = \left( \frac{\delta}{z_{1-\alpha/2} - z_{1-\beta}} \right)^2 \]
Where $j$ is the number of observed variables, $k$ is the number of latent variables, $\rho$ is the estimated Gini correlation for a bivariate normal random vector, $\delta$ is the anticipated effect size, $\alpha$ is the Sidak-corrected Type I error rate, $\beta$ is the Type II error rate, and $z$ is a standard normal score (Westland, 2010).

4.14.2.4 Final field study:

In the final field study respondents were first briefly introduced about the objectives of the study, and were categorically advised to keep a mind that questions are related to subjective ethnicity, store choice and shopping behaviour. Respondents filled the data in presence of researcher. Data for the final field study was collected during August 2013 to November 2013. A total of 783 data points were collected from six ethnic groups.

4.14.3 Data entry check:

Data was entered into excel sheet and was appropriately coded. This data was transformed to .sav which is SPSS supported data file format and is used for preliminary analysis, and PLS-SEM was used for testing structural and measurement model.

A random check was performed to detect error in data entry process. A random sample of 5 percent ($n=25$) was selected and the values entered into the data file were compared with those in the questionnaire. As there was no error in the random sample, no additional cases were selected for data entry accuracy checking.

Reverse coded item were transformed using formula $[(\text{Maximum achievable score by the scale} + \text{Minimum achievable score by the scale}) – \text{score given by the respondent}]$. This ensured that in all subsequent analysis and interpretation, all items were coded in the same direction.

4.14.4 Preliminary data analysis:

4.14.4.1 Sample Characteristics:

A total of 783 respondents’ responses were collected. The respondents were selected unevenly from six ethnic groups. There were 162 Sharma respondents, 133
Rajput respondents, 154 Mahajan respondents, 123 Muslim respondents, 101 Kashmiri Pandits, 110 Sikh respondents. Out of which 367 (47%) were males and 416 (53%) were females (Appendix 4.1) The majority of respondents were females, because shopping is a likeable activity for females than males, and the difference between both male and female was only 6%, which was a healthy representation of both sexes.

In terms of age, 16% (130) of the respondents were in the age group of 18-22 years; 52.7% (413) were in the age group of 23-26 years; and 30.65% in the age group of 27-30 years. In terms of income, 31.93% (250) of the respondents were in the income range of Rs. 2,50,000 to Rs. 5,00,000; 44.7% in the income range of Rs. 5,00,000 to Rs. 7,50,000; and 23.37% in the income range of Rs. 7,50,000 to Rs. 10,00,000.

4.14.4.2. Identification of outliers, missing value analysis:

Outliers can severely affect data analysis and it is recommended to detect and remove outliers using factor loadings (univariate) before conducting main analysis. Observations with absolute standardized value beyond 4 can be considered as outlier (Hair, et. al., 2009). In the present study, no data point was identified as outlier.

There were 17 respondents in whose survey response, one or more data values were missing. This missing data can possibly bias the analysis or give misleading results. It becomes important to make sure that the missing data does not harm the analysis. The following process was conducted to check this issue. The missing data could be of three types: MCAR (missing completely at random), MAR (missing at random), and MNAR (missing not at random). MCAR means that the probability that a variable value is missing is not dependent on the data collected or the values missing, i.e., the missing data pattern is completely random. MAR means that the probability of the value missing is partly dependent on the observed or collected data but not on the data which is missing. MNAR means that variable values missing depend on the missing values themselves (Lance and Vandeberg, 2008). Of the three, only MCAR can be considered missing completely at random.
To validate that missing data of the respondent was “missing at random” Little’s (1988) MCAR was performed. The test compares the means of each pattern of missing data with the expected population means (i.e., maximum likelihood estimates) and calculates an overall, weighted squared deviation score. If the data is truly MCAR, each sub-sample should produce the same means of each variable as those calculated for the entire data set, a robust method of parameter estimation. The result was “significant” indicating that data found at missing was completely at random. There are two approaches to deal with missing values: (1) case wise deletion, (2) imputation. Kregzdyte, et. al., (2004) conclude that case wise deletion is an easy but inefficient approach of handling missing data. King, et. al., (1998) had gone to the extent of defining case wise deletion method as “evil” approach. Schaef and Graham (2002) suggested that researchers should use imputation methods if data is MCAR. There is a possibility that a particular item was missed just because respondent overlooked certain question. As there is no pattern in missing data, we imputed missing items. Following Newman (2003) recommendation, missing values were imputed using maximum likelihood (ML) estimation. We also conducted T-tests to find if there was any significant difference between the means of imputed data and data obtained by case-wise deletion. There was no significant difference observed and subsequently we also tested the structural model with the case-wise deleted data and found there to be no noticeable change in the resultant findings (Appendix 4.11).

4.13.4.3 Test for uni-dimensionality:

“Unidimensionality means that the correlations among items assumed to measure same concept are only due to concept” (Blunch, 2013). Unidimensionality of measure is a necessary condition for assigning meaning to estimated constructs. It is a crucial undertaking in theory testing and development (Anderson and Gerbing, 1988). Unidimensionality of well-established multi-item instrument can be confirmed using separate exploratory factor analysis on each subscale (Conway and Huffcut, 2003). To assess unidimensionality, we conducted exploratory factor analysis on constructs using SPSS. Constructs were factor analyzed by principle component analysis (PCA) with oblique rotation (promax rotation). Promax rotation was chosen as it more accurately
reflects the underlying structure and nature of the data (Tucker and MacCallum, 1997). The result of the unidimensionality at individual first-order construct level is presented in Appendix 4.9.

To assess dimensionality and reliability of measures, following criteria were used: (i) the percentage of total variance extracted by the factors > 50% (Hair, et. al., 1998); (ii) item load (>0.5) on the designated dimension (Netemeyer, et. al., 2003); and/or (iii) cross-loadings difference was (>0.10) (Kathuria, 2000). For assessing reliability of the scales to measure the construct, the criteria Cronbach’s alpha (α>0.70) was chosen (Nunnally, 1978).

To verify the overall sampling adequacy, Kaiser-Meyer-Olkin measure of sampling adequacy (KMO statistics) was checked. This index reflects the sampling adequacy for the factor analysis technique to be used. The value of the index ranges from 0 to 1 with at least 0.6 is deemed as acceptable (Worthigton and Whitlaker, 2006) Appendix 4.9.

4.14.4.4 Common method bias:

In situations where a respondent needs to put in lot of cognitive effort to answer several questions on wide range of topics there is a high possibility that he/she finds an easier way of generating such answer (Krosnick 1991, 1999; Sudman, et. al., 1996; Tourangeau, et. al., 2000). This can result in a systematic variance in the data. This systematic method variance can result in: (a) incorrect conclusions about the adequacy of a scale’s reliability and convergent validity, (b) underestimated correlations in meta-analyses, and (c) biased estimates of the effects of other correlated predictors on the criterion variable (MacKenzie and Podsakoff, 2012). To test and control for CMV both ex-ante and ex-post approaches were employed.

Ex-ante following steps were taken before final data collection. First, each item was systematically examined to ensure that ambiguous, vague and unfamiliar terms were excluded at the time of designing of the instrument (Harrison, et. al., 1996; Lindell and Whitney, 2001; Podsakoff, et. al., 2003). Second, few negatively worded items were included in the survey instrument to overcome the consistency motive (Sekaran, 1992). Third, respondents were assured of the anonymity and confidentiality of the study
(Podsakoff, et. al., 2003). Fourth, respondents were informed that there was no right or wrong answers and they should answer as honestly as possible (Chang, et. al., 2010).

Following ex-post approach, we used two methods to check for CMV. First, the Harman one-factor test was conducted to find the possibility of single dominant factor (Podsakoff and Organ, 1986). The results of Harman one-factor test showed that the extracted one factor explained only 16.317 (< 50%) of the variance (Appendix 4.20). Absence of a single dominant factor indicates that CMV did not significantly affect the relationships (Scott and Bruce, 1994). Second, effect of CMV was statistically checked using the common latent factor method (Williams and Anderson, 1994). In this method, all observed items in the model are connected to one latent factor and then the regression weights of the paths are constrained to the same value. Gaskin (2012) suggests that maximum permissible value for shared variance is 20%. The square of these un-standardized regression coefficients from the common factor was approximately 3%, which is the common shared variance indicating that there were no significant issues of CMV in the data.

4.14.5 Structural Equation Modeling:

Structural Equation Modeling (SEM) was considered to be an appropriate methodology for analyzing the data and using the information thus obtained for developing the store choice behaviour and testing the hypotheses of the present study. The biggest advantage of SEM is the simultaneous evaluation of measurement model as well as the structural model (Bollen, 1989). This aspect is a limitation in the traditional approaches like regression analysis (Fornell, 1987) which has been overcome in SEM. SEM also provides the opportunity to test the theoretical based assumptions against empirical set of data (Chin, 1998a; Chin, et. al., 2003) and the entire model can be tested simultaneously (Kline, 1998). SEM is very useful within the context of the present study which analyses multiple dependent variables like corporate social performance, corporate environmental performance, corporate economic performance, customer’s attitude, brand equity, and the firm’s reputation (Ryan, et. al., 1999). It examines and explores the measurement models having indicators with optimized weights, making the estimation
more valid as compared to traditional methods wherein the indicators are equally weighted (McDoland, 1996).

There are two approaches available in structural equation modeling. One is the Covariance based SEM (CB-SEM) propounded by Joreskog (1973) and Wiley (1973) and the other is the Component Based PLS (CB-PLS) also known as PLS-SEM developed by Wold (1985). The main difference between these two approaches of the SEM is that the CB-SEM estimates the parameters of a given model by minimizing the difference between the covariance matrix based on sample and covariance matrix based on model (Joreskog, 1993). In contrast, PLS-SEM estimates the model by minimizing the residual variance of the latent and observed dependent variables (Chin, 1998a).

4.14.6 Partial Least Square Based Structural Equation Modelling:

We have used Partial Least Square Based Structural Equation Modeling (PLS-SEM), in the present study for analyzing the measurement and structural model. There are several reasons for using the PLS-SEM in this study. Researchers over the period of time have used PLS-SEM extensively especially in recent years and have mentioned the applicability of it in terms of insight it provides with regard to the construct’s measurement model (Gudergan, et. al., 2008) and impact performance matrix analysis (Henseler and Chin, 2010) and non-linear effects (Rigdon, et. al., 2010). These applications highlight its expansion as a research tool in a variety of marketing and social science studies (Hair, et. al., 2012).

PLS-SEM has various advantages in the context of the present study. Since it estimates the score of latent variables as the exact combination of concerned manifest variables, it captures the variance useful in explaining the endogenous latent variables (Hair, et. al., 2012). It also estimates the model through a series of OLS regressions and relaxes the assumptions of multivariate normality thereby enhancing its applicability in many complex studies (Bollen, 1989; Cassel, et. al., 1999; Chin, 1998b; Dijkstra, 2010). Due to the estimation based on a series of OLS regressions, there has been strict demand with regard to the sample size and it also attains a higher degree of statistical power (Reinartz, et. al., 2009). Looking at the complexity of the models, it has the capability to
take care of the identification issues providing it an edge over covariance based SEM. It also provides more flexibility than covariance based SEM even if the formative measures are used in the same model (Hair, et. al., 2012).

The proposed conceptual model in the present study includes reflective constructs; hence PLS-SEM is more suitable for making the analysis. It also includes a second model in the form of subjective ethnicity, store choice and shopping behaviour. PLS-SEM is capable of handling such second order models (Chin, 1998a). In view of the discussion, it was appropriate to consider the use PLS-SEM as a quantitative tool in this study. The PLS-SEM approach is good when theory is less developed in comparison to CB-SEM (Hair, et. al., 2012).

4.14.6.1. Study site and sample:

The data for the present study were collected through structured questionnaires from urban Jammu region of Jammu and Kashmir State (India). Jammu region is a mix of various ethnic groups. Most of the Sikh community residing in Jammu is refugees who took refuge in this area after communal disturbances which erupted at the time of partition of India in 1947. Kashmiri pundits are originally the inhabitants of Kashmir valley but after the onset of militancy in 1980, they started moving to other parts of the country but majority of their population settled in Jammu. Other four communities selected for the study, like, Sharma, Rajput, Muslim, and Mahajan have been residing in Jammu well before the partition of country, and they constitute a majority of ethnic groups in Jammu. A total of 783 relevant responses were gathered from 800 questionnaires distributed to respondents, which yielded a response rate of 97.78%. The data were collected from respondents during shopping at various markets of Jammu region. The selected markets cater large chunk of selected ethnic groups.

4.14.7 Scales and Measures:

4.14.7.1. Listing of the Scales and Measures:

The scales were borrowed from eleven behavioural constructs identified through qualitative research named as cultural intelligence, emotional intelligence, practical
intelligence, culture self, ethnic identity, status consciousness, companion opinion, need for touch, perceived self congruity, perceived sensitivity to ethnic culture and pragmatic legitimacy.

**Cultural intelligence:** The concept of cultural intelligence was given by Ang, *et. al.*, (2007). The scale has four first order constructs named as: (a) cognitive, (b) metacognitive, (c) motivational, and (d) behavioural. In the present study the cultural intelligence scale was developed using ethnographic interviews and grounded theory (for items theoretical saturation).

**Emotional intelligence:** The concept of emotional intelligence was taken from Salovey and Mayor (1990). The scale is divided into four sub-constructs named as: (a) self management, (b) self awareness, (c) social awareness, and (d) relationship management. In the above mentioned four sub-constructs, scales were developed using ethnographic interviews and grounded theory (for items theoretical saturation).

**Practical intelligence:** The concept of practical intelligence was taken from Sternber, *et. al.*, (2000). The scale developed through ethnographic interviews and grounded theory (for items theoretical saturation) has three sub-constructs named as negotiation, information search, and apathy.

**Culture self:** The concept of culture self was taken from Markus and Kitayama (1991). The scale developed through ethnographic interviews and grounded theory (for items theoretical saturation) has three sub-constructs named as individual self, collective self and relational self (companion relationship, store relationship, personal relationship).

**Ethnic identity:** The concept of ethnic identity was taken from Deshpande, *et. al.*, (1986). The scale developed through ethnographic interviews and grounded theory (for items theoretical saturation) has two sub-constructs named as pride and desire to maintain ethnic identity and ethnic attachment.

**Status consciousness:** The concept of status consciousness was taken from Donnenwerth and Foa (1974). The scale was developed through ethnographic interviews and grounded theory (for items theoretical saturation).
**Need for touch**: The concept of need for touch was taken from Neisser (1976) and the scale developed through ethnographic interviews and grounded theory (for items theoretical saturation).

**Companion opinion**: The concept of companion opinion was taken from Riesman, *et al.*, (1950) and the scale developed through ethnographic interviews and grounded theory (for items theoretical saturation).

**Perceived self congruity**: The concept of perceived self congruity was taken from Bitner (1992) and the scale developed through ethnographic interviews and grounded theory (for items theoretical saturation).

**Perceived sensitivity to ethnic culture**: The concept of perceived sensitivity to ethnic culture was taken from Rapoport (1990) and the scale developed through ethnographic interviews and grounded theory (for items theoretical saturation).

**Pragmatic legitimacy**: The concept of pragmatic legitimacy was taken from Suchman (1995) and the scale developed through ethnographic interviews and grounded theory (for items theoretical saturation).

### 4.14.8 Pretesting of the constructs:

Pre-testing of the constructs is done to check the distributional properties of the sample in line with the assumptions made. The analysis for pre-testing is done by collecting some initial sample. In our study, the sampling frame itself was very limited which prevented us from undertaking a full scale pre-testing based on collection of data in an elaborate manner. However, the face validity was conducted for the items of the scales used for measuring the constructs. Nunnally and Bernstein (1994) describe face validity as the degree to which the measures reflect what they are intended to measure in a study. As per Allen and Yen (1979) face validity helps the respondents in judging the appropriateness of items corresponding to a construct and also helps in assessing the objective underlying that construct.

For the purposes of present study, questionnaire was prepared by combining the items of all the scales and measures. The questionnaire developed was used to gather responses from consumers. The items with heavy text were not placed together. It was
attempted to break the monotony of the respondents by placing some interesting items in between the other items.

The next stage was to conduct the face validity of the questionnaire which was done in two stages. In the first stage, help of an expert was taken who had the knowledge of the procedure. The expert helped in removing ambiguities in the questions to a large extent. In the next stage, the purified questionnaire was administered to one Professor at Indian Institute of Management, Ahmadabad, one Assistant Professor at Shri Mata Vaishno Devi University, Jammu and two Professors who attended Doctoral Consortium for Scholars at Indian Institute of Management, Ahmadabad. Thus the face validity of the questionnaire was completed and all necessary changes observed or suggested during the face validity stage were incorporated in the questionnaire. The modified questionnaire after face validity is attached in Appendix 4.25 and the previous questionnaire is attached in Appendix 4.26.

4.14.9 Questionnaire design and research variables:

The questionnaire was developed from ethnographic interviews conducted on six ethnic groups. The scales of subjective ethnicity (emotional intelligence, practical intelligence, culture self and ethnic identity), store choice (perceived self congruity, perceived sensitivity to ethnic culture, and pragmatic legitimacy), and shopping behaviour (status consciousness, need for touch, and companion opinion) were developed through ethnographic interviews, and later EFA was applied to test scale reliability and validity and then CFA was run.

To study the store choice behaviour of consumers, subjective ethnicity and shopping behaviour of six ethnic groups were utilized and also to find out criteria for differences, if any, which existed between them. To understand cultural intelligence 16 items were utilized, for emotional intelligence 30 items were utilized, for practical intelligence 11 items were utilized, for ethnic identity 6 items were utilized, and for culture self 16 were utilized. Over all five constructs were utilized to determine the concept of subjective ethnicity. To determine shopping behaviour three constructs were named as: status conscious, need for touch, companion opinion. Status conscious contains 4 items, companion opinion contains 3 items, and need for touch contains 5 items.
Three constructs were named as: pragmatic legitimacy, perceived sensitivity to ethnic culture, and perceived self congruity. Pragmatic legitimacy contains 5 items, perceived sensitivity to ethnic culture contains 3 items, and perceived self congruity contains 3 items. A five point likert scale was used for all the constructs of subjective ethnicity, store choice, and shopping behaviour. In five point likert scale assigned values ranged from 1 depicting “strongly disagree”, 2 depicting “disagree”, 3 depicting “neutral”, 4 depicting “agree”, and 5 depicting “strongly agree”. All the responses of consumers were focused on one question, namely, “The role of ethnicity on store choice”. The PLS procedure of structural equation modeling was used in this study (Hair, et. al., 2012). Correlation matrix was used to examine the hypothesized model. At last standardized solutions were utilized in reporting the results (Appendix 4.11). Structural equation modeling was designed to check the conceptual model which embeds hypothetical constructs (Yoon, et. al., 2001). SEM was an appropriate procedure to understand the hypothetical model.

4.14.10 Scale Validation:

Prior to PLS-SEM analysis, an exploratory analysis (EFA) was executed to reduce the number of variables in cultural intelligence, emotional intelligence, practical intelligence, culture self, ethnic identity, companion opinion, status consciousness, need for touch, pragmatic legitimacy, perceived sensitivity to ethnic culture, and perceived self congruity. The factors resulting from EFA were represented as correlation among interrelated variables (Hair, et.al., 1998).

4.14.11 Correlation and factor analysis:

The correlation test was examined on all determinants of subjective ethnicity, store choice and shopping behaviour. Along with that item total statistics and correlation was conducted on all items of first level constructs to test the convergence of an item with all other items in each construct. In contrast, item total statistics describe the relevance of containing an item in a construct, and those items were deleted from the construct, the deletion of which helped to increase the reliability of the scale (Appendix 4.2 to 4.8).
<table>
<thead>
<tr>
<th>Questions</th>
<th>Criteria w.r.t reflective construct</th>
<th>Relevant in the context of the study</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Directions of causality from the construct to measure implied by the conceptual definition</td>
<td>Direction of causality is from construct to items</td>
<td>Direction of causality is from items to the construct in case of measurement of subjective ethnicity, shopping behaviour and store choice</td>
</tr>
<tr>
<td>Are the indicators (items) (a) defining characteristics or (b) manifestations of the construct?</td>
<td>Indicators are manifestations of the construct</td>
<td>In present study, the indicators CI, EI, PI, CS, Eth. Idn are defining subjective ethnicity as a construct and NFT, SC, CO define shopping behaviour, and PSC, PSEC, PL define store choice</td>
</tr>
<tr>
<td>Would changes in the indicators/Item cause changes in the construct or not?</td>
<td>Changes in the indicator should not cause changes in the construct</td>
<td>The changes in the indicators for (CI, PI, EI, CS, Eth. Idn), (NFT, SC, CO) and (PSC, PSEC, PL) does not cause any changes in subjective ethnicity, store choice and shopping behaviour</td>
</tr>
<tr>
<td>Would changes in the construct cause changes in the indicators?</td>
<td>Changes in the construct do cause changes in the indicators</td>
<td>Change in any of the construct CI, EI, PI, CS, Eth. Idn), (NFT, SC, CO) and (PSC, PSEC, PL) cause changes in their indicators</td>
</tr>
<tr>
<td>2. Interchangeability of the indicators/items</td>
<td>Indicators should be interchangesable</td>
<td>In present study, the indicators are interchangeable among different dimensions</td>
</tr>
<tr>
<td>Should the indicators have the same or similar Content? Do the indicators share a common theme?</td>
<td>Indicators should have the same or similar content/indicators should share a common theme</td>
<td>In the present study, the indicators do have the same or similar content</td>
</tr>
<tr>
<td>Would dropping one of the indicators alter the conceptual domain of the construct?</td>
<td>Dropping an indicator should not alter the conceptual domain of the construct</td>
<td>In the case dropping any determinant for subjective ethnicity, store choice and shopping behaviour does not cause any change</td>
</tr>
<tr>
<td>3. Covariance among the indicators</td>
<td>Indicators are expected to covary with each other</td>
<td>The indicators need to covary with each other in</td>
</tr>
</tbody>
</table>
the construct for (CI, EI, CS, PI, Eth. Idn), (NFT, SC, CO), and (PSC, PSEC, PL) in the present study

Should a change in one of the indicators be associated with changes in the other indicators?  
Yes  
Change in one of the indicators is associated with changes in other indicators for (CI, PI, EI, CS, Eth. Idn), (NFT, SC, CO), and (PSC, PSEC, PL) in the present study

4. Nomological net for the construct indicators  
Nomological net for the indicators should not differ

Are the indicators/items expected to have the same antecedents and consequences?  
Indicators are required to have the same antecedents and consequences

Antecedents and consequences are needed to be same for the indicators in construct considered for subjective ethnicity, store choice and shopping behaviour

4.14.12 Nature of the Measurement Model for the construct:

In this section, we discussed the reflective nature of the measurement model of the construct for measuring subjective ethnicity, store choice and shopping behaviour. Jarvis, et. al., (2003) suggested asking four sets of questions in combination to ascertain the appropriate measurement model. Based on this, Table 4.4 presents an analysis of the measure of subjective ethnicity, store choice and shopping behaviour with regard to its measurement model.

4.14.13 Exploratory Factor Analysis:

Taking varimax rotation, the latent root criterion of 1.0 was considered for factor inclusion, and a 0.60 value was set for factor loading as a benchmark for included items in a factor. Then a composite factor score was calculated for included items. All of these procedures were undertaken by using SPSS 20. The correlation of the items in the same
construct was checked and the items which were negatively correlated with one another in the same construct were deleted (Devellis, 2003).

The method suggested by Hair, et. al., (1998) was used for ascertaining the dimensionality and reliability of the items. As per this method the data should be checked on four criteria. First, the factors should explain more than 50% of the total variance (Hair, et. al., 1998). Second, the items should load heavily on the corresponding dimensions (Netemeyer, et. al., 2003). Third, the loading shall be more than 0.50 for achieving the practical significance (Hair, et. al., 1998). Fourth, the cross loading difference of an indicator should be more than 0.10 for retaining that indicator (Kathuria, 2000).

Each construct was analyzed by factor analysis using the method of principal component analysis for factor extraction. The number of components to be extracted was based on Eigen value more than 1 and Promax rotation. Promax rotation, i.e., oblique rotation has been used because we assume there are correlations between the dimensions. Promax rotation would truly reflect the underlying structure and nature of the data presented. A pilot study was conducted on 300 consumers to check the feasibility of the items. Some items were deleted based on the criteria suggested by Hair, et. al., (1998) and the reason for deletion of indicators from each construct has been mentioned in Appendix 4.9.

The composite factors were used as indicators to measure a construct. This method of analysis reduces the problem of multicollinearity or error variance correlations among confirmatory factor analysis (CFA) in the measure model. The reductions of such errors were must in structural equation modeling (Bollen, 1989). The outcome of EFA analysis determined correlated significant factors, including five subjective ethnicity factors, and three each for store choice and shopping behaviour. In EFA analysis, weak indicators and factors were deleted. The result of EFA analysis is shown in Appendix 4.9. The major changes happened in emotional intelligence and minor changes in ethnic identity and cultural intelligence. In cultural intelligence, one item was deleted from motivational construct (its item loadings less than 0.6), in ethnic identity, language use construct got deleted (Alpha <0.7). In emotional intelligence, factors like consideration set formation,
personal outcome decision making, market place interface, accurate self assessment, emotional self assessment, dispositional self control, self regulatory strength depletion, adaptability, social orientation, and service orientation were deleted (Alpha value <0.7)

4.14.14 Two step approach:

The SEM methodology follows the two step approach, i.e., first the measurement model is estimated and then the structural model is tested. The measurement model estimates whether the items used to capture each latent construct effectively represent those models or not. In case they do not, the structural relationships found through the structural model would be spurious and misleading. In other words, if a single step approach is considered, the measurement and structural model will be estimated simultaneously and suffer from confounded estimation as the fit will be maximized at the expense of meaningful interpretation of the constructs (Anderson and Gerbing, 1988). This interpretational error occurs due to wrongful empirical meaning being assigned to the latent or unobserved variable without apriori estimation of unknown parameters (Burt, 1976). The potential for this confounding is minimized if the measurement model is previously estimated without the constraints of structural parameters that relate the latent or unobserved variables with each other. The two step approach lends the following advantages over the single step approach (Anderson and Gerbing, 1988):

a) It tests the significance of all pattern coefficients
b) It gives an assessment of whether the data captured effectively represents the latent constructs it is deemed to represent, so that the resultant construct can be truly related to other similarly represented constructs.

c) Re-specification is possible at this stage to reach a better fit of items representing the constructs so that proper analysis of the structural relationships can be conducted.

d) It allows for comparisons between different theoretical alternatives which could suggest different configurations in which the constructs can be represented.
PLS-SEM was used to analyze the measurement and structural model. Since PLS-SEM does not assume the distributional requirement for the set of data hence traditional parametric-based techniques for testing the significance is not appropriate (Chin, 1998). Due to this reason, the evaluation of the PLS-SEM models also require prediction-oriented measures which are non-parametric in nature, i.e., distribution free in nature (Wold, 1980, 1985; Chin 1998). In PLS-SEM the evaluation is made using procedures like the R-square for dependent latent variables, the Stone-Geisser (Stone, 1974; Geisser, 1975) test for predictive relevance, average variance extracted (AVE) for validity suggested by Fornell and Larcker (1981), and resampling procedures such as bootstrapping to establish the nature of stability of the estimates (Vinzi, et. al., 2008). In the present study, Smart PLS 2.0 M3 Release was used for analyzing the data and arriving at the results.

4.14.1. Measurement model (Stage One):

After EFA analysis, confirmatory factor analysis (CFA) was done. In CFA, measurement model specifies the relation of indicators with latent constructs, and constructs interrelation was tested. The testing of measurement models should be done before simultaneous examination of measurement and structural equation models. Therefore, it is mandatory to test each construct in the model separately (Anderson and Gerbing, 1988). The CFA was examined on determinants of subjective ethnicity (cultural intelligence, emotional intelligence, practical intelligence, culture self, ethnic identity), store choice (pragmatic legitimacy, perceived sensitivity to ethnic culture, perceived self congruity) and shopping behaviour (companion opinion, need for touch, status consciousness), and the outcome of CFA is shown in Appendix 4.10. The measurement model described the relationship between latent constructs and indicators of those constructs (Appendix 4.11). CFA solves the issue of discriminant, convergent and constructs reliability. The squared multiple correlations reflect each item’s variance explained by their respective factors. From the results it was predicted that variance explained ranged from 58% to 78%. The factor loadings of each item under their respective construct were significantly high (ranging from 0.68 to 0.84), which exceeds the critical value of 0.5, and therefore predicts convergent validity (Bagozzi and Yi,
Along with that, the T-value of factor loadings were statistically significant (T > 1.96), and its value ranged from 2.57 to 5.12 (Appendix 4.10), thereby indicating convergent validity (Anderson and Gerbing, 1988; Bollen, 1989). The results suggest that all indicators were significantly related to their constructs with low-standard residuals, which satisfy internal consistency and scale fit (Appendix 4.11). The composite reliability of constructs ranged from 0.708 to 0.856, exceeding the critical value of 0.70 and thus predicting strong psychometric properties (Bagozzi and Yi, 1988). The correlation between latent constructs was significant at 95% degree of confidence, and the constructs correlate at a value which does not show high multicollinearity problem (Tables 5.1 and 5.2), and such results provide some evidence of discriminant validity. The AVE determines convergent validity as its value ranged from 0.585 to 0.813, which exceeded its critical value of 0.5 (Bagozzi and Yi, 1988), and reduced the chances of measurement error (Babin and Anderson, 2009). The results also show that subjective ethnicity sub-constructs relate with each other, and same thing happen in the case of store choice and shopping behaviour sub-construct (Appendix 4.19). Fornell-Larcker criterion is 30 years old concept, which is best till date to solve the problem of discriminant validity (Ronokko and Everman, 2013). The results predict that FK-Test values were above the 0.5 critical values (Table 5.3). The outer loadings and cross-loadings for cultural intelligence, emotional intelligence, culture self, practical intelligence, ethnic identity, store choice and shopping behaviour are shown in Appendix 4.12 to 4.18.

4.14.1.1. Goodness of Measures:

CFA was used in the present study. The two main criteria used for testing goodness of measures are validity and reliability. Reliability is a test of how consistently a measuring instrument measures whatever concept it is measuring. In Table 5.1 the composite reliability exceeded the benchmark value of 0.70, which depicts strong composite reliability (Bagozzi and Yi, 1988). In contrast, validity is a test of how well an instrument that is developed measures the particular concept it is intended to measure (Sekaran and Bougie, 2010). Based on the conceptual proposed model the reliability and
validity of the model is empirically tested using Smart PLS 2.0 software (Rigle, et. al., 2012).

4.14.1.2 Construct Validity:

Construct validity is used to provide further proof that item measures taken from a sample represent the actual true score in the population (Hair, et. al., 2012). It checks how well the results obtained from item measures test the designed theory (Sekaran and Bougie, 2010). In this study, the construct validity was examined through factor loadings, and the items with value greater than 0.60 were considered significant for the underlying construct.

Results presented in Appendix 4.10 show the scores which are greater than 0.50 in value. In Appendix 4.11 standardized loadings and t value predict that all indicators relate positively to their relevant constructs, and the indicators loadings were greater than 0.60. The error variance is also within its limits and all the first order, second order, third order and fourth order (some places) constructs show significant path relationships. Along with the construct validity with outer loadings and cross loadings are also judged. Items with lowest outer loadings (below 0.50) are to be eliminated from the scale with the condition that deleted item does not reduce the average variance extracted (AVE) value (Hair, et. al., 2012). Moreover, AVE value should be at least 0.50 which indicates the construct explains more than half of the variance of its indicators. If AVE value is less than 0.50, then more errors remain in the items which may not give accurate analysis result at the later stage. Outer loading above 0.50 is considered significant (Hair, et. al., 2012). The results of cross loadings and outer loadings in the present study are shown in Appendices 4.12 to 4.18 which indicate that the values of items in their respective heads were greater than 0.50 (Hair, et. al., 2012).

4.14.1.3 Convergent Validity:

Convergent validity is the degree to which scale item is so close to others that it should theoretically be related to each other. Accordingly, in order to establish convergent validity, the main factor loadings, composite reliability (CR) and AVE were used. The loadings for all items exceeded the recommended value of greater than 0.50. Composite reliability measures of internal consistency reliability should be above 0.70.
(Hair, *et. al.*, 2012). The analysis of data collected (Table 5.1) showed the convergent validity which exceeded recommended value of 0.70, besides, the AVE. Hence, the constructs explain more than half of the variance of its indicators and a smaller error remains in the items than the variance explained by the construct. Consequently, the overall measurement model of this study demonstrated an adequate convergent validity as depicted by results in Table 5.1. (Bagozzi and Yi, 1988). The results of t values of the factors thereby indicate convergent validity of the constructs (Anderson and Gerbing, 1988) (Appendix 4.11), the strong relation of indicators with their relevant constructs depicts strong internal consistency and scale fit.

### 4.14.1.4 Discriminant validity:

It is the extent to which a construct is truly distinct from other constructs and determines whether the measurement is unrelated, as well as how many indicators represent only a single construct (Hair, *et. al.*, 2012). The discriminant validity was assessed by determining the correlations between the measures of potentially overlapping constructs. Items should load more strongly on their own constructs in the model, and the square root of average variance shared between each construct and its measures should be greater than the variance shared between the construct and other constructs (Fornell and Larcker, 1981; Hair, *et. al.*, 2012). The results of discriminant validity are shown in Table 5.1 which predicts that value of FK Test were greater than 0.50 (Fornell and Larcker, 1981).

### 4.14.1.5 Goodness-of-fit Measures:

Goodness-of-fit (GoF) is the geometric mean of the AVE or average communality and the average of R square of endogenous latent variables represents an index for validating the overall fit of the model. GoF was used to take into account the model performance in both the measurement and the structural model. Thus, it provides a single measure for the overall prediction performance of the model. GoF ranges between 0 and 1, where a higher value represents better path model estimation (Tenenhaus, *et. al.*, 2005). Global validation of PLS models use cut-off values to determine the entire model goodness-of-fit measure such as GoF smaller than 0.10 indicate poor-fit, and GoF larger
than 0.36 means the model is good-fit (Wetzels, *et. al.*, 2009). The result stated that the GoF index calculated from Table 5.1 was 0.677.


In stage two, structural relationships were tested using SEM. The proposed model and the hypotheses were tested using the PLS-SEM 2.0 package. From the qualitative analysis it was ascertained that ethnicity influences store choice and shopping behaviour has relationship with store choice and subjective ethnicity. So, to determine the right model, shopping was considered as moderator in model 1 and it was also considered as mediator in model 2.

**Model testing 1**: Shopping behaviour moderates the relation between subjective ethnicity and store choice.

<table>
<thead>
<tr>
<th>Path Coeff</th>
<th>Mean</th>
<th>Std Dev</th>
<th>T value</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subjective ethnicity -&gt; Store choice</td>
<td>0.6624</td>
<td>2.66</td>
<td>0.0267</td>
<td>24.844</td>
</tr>
<tr>
<td>Subjective ethnicity -&gt; Store choice</td>
<td>0.2234</td>
<td>2.13</td>
<td>0.0243</td>
<td>0.432</td>
</tr>
</tbody>
</table>

“The GoF can be understood as the geometric mean of two types of $R^2$ values’ averages: the average communality, $\Theta_{Com}$, i.e., the average proportion of variance explained when regressing the reflective indicators on their latent variables (Fornell and Larcker, 1981), and $\Theta_R^2_{inner}$, i.e., the average $R^2$ of the endogenous latent variables” (Henseler and Saratedt, 2013). The formula for the GoF is written as:

$$\text{GoF} = \sqrt{\Theta_{Com} \cdot \Theta_R^2_{inner}}$$

The GoF for the first model is 0.21 which indicates that model is not a good fit (Wetzels, *et. al.*, 2009). Moreover, the interactive moderating effect of shopping behaviour on the relation between subjective ethnicity and store choice ascertained that the T value (0.432) is less than 1.96. The P value is greater than 95% significant level. So the first model is not a suitable one for the analysis (Table 4.5).
**Model testing 2:** Shopping behaviour mediates the relation between subjective ethnicity and store choice.

Mediation Analysis: Lance and Vandenberg (2008) recommend that researchers framing mediation hypotheses should use strong confirmatory analytic techniques such as SEM to test these hypotheses. In the simple, three-variable mediation model (using manifest variables) there would not be much difference between regression and SEM. However, as models increase in complexity (e.g., chain models, parallel mediator models, multiple outcome models, non-recursive models) there would be significant differences in results obtain by regression and SEM (James and Brett, 1984).

To test the potential mediation effects of trust, role ambiguity and salesperson effort, we used Baron and Kenny’s (1986) approach and subsequently Sobel test and Bootstrapping were performed.

**4.14.15 Mediation:**

A causal variable X is affecting an outcome variable Y. The unmediated model can be represented by:

\[
\begin{align*}
X \rightarrow c \rightarrow Y
\end{align*}
\]

Complete mediation is the case in which variable X no longer affects Y after M has been controlled and so path \(c'\) is zero. Partial mediation is the case in which the path from X to
Y is reduced in absolute size but is still different from zero when the mediator is introduced.

Path c in the above model is called the total effect. The effect of X on Y may be mediated by a process or mediating variable M, and the variable X may still affect Y. The mediated model is as given below:

**Baron and Kenny approach:**

Baron and Kenny (1986), Judd and Kenny (1981), and James and Brett (1984) discuss three steps in establishing mediation:

1. X is significantly related to M.

2. M is significantly related to Y.

3. The relationship of X to Y diminishes when M is in the model.

If X and Y relationship become insignificant on adding M variable than M completely mediates the X-Y relationship. If X and Y relationship reduce in strength but not become insignificant on adding M variable than M partially mediates the X-Y relationship.

Baron and Kenny’s (1986) most used lines:

“A variable functions as a mediator when it meets the following conditions: (a) variations in levels of the independent variables significantly account for variations in the presumed mediator (i.e., Path a), (b) variations in the mediator significantly account for variations in the dependent variable (i.e., Path b), and (c) when Paths a and b are controlled, a previously significant relation between the independent and dependent variables is no longer significant, with the strongest demonstrations of mediation occurring when Path c is zero”.

The three regression equations used in mediation analysis are:

\[ M = i_1 + Ax + e_1 \]  \hspace{1cm} (Eq. 1)

\[ Y = i_2 + c'X +e_2 \]  \hspace{1cm} (Eq. 2)
Y = i₃ + cX + bM + e₃

“To test mediation, one should estimate the three following regression equations: first, regressing the mediator on the independent variable; second, regressing the dependent variable on the independent variable; and third, regressing the dependent variable on both the independent variable and on the mediator… To establish mediation, the following conditions must hold: First, the independent variable must affect the mediator in the first equation; second, the independent variable must be shown to affect the independent variable in the third equation.” (Cited in Zhao, et. al., (2010).

<table>
<thead>
<tr>
<th>Table 4.6: Testing mediation using Baron and Kenny approach</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Independent</strong></td>
</tr>
<tr>
<td>-----------------</td>
</tr>
<tr>
<td><strong>Main</strong></td>
</tr>
<tr>
<td><strong>Ethnicity</strong></td>
</tr>
<tr>
<td><strong>Female</strong></td>
</tr>
<tr>
<td><strong>Mahajan</strong></td>
</tr>
<tr>
<td><strong>Muslim</strong></td>
</tr>
<tr>
<td><strong>Rajput</strong></td>
</tr>
<tr>
<td><strong>Kashmiri</strong></td>
</tr>
<tr>
<td><strong>Pandit</strong></td>
</tr>
<tr>
<td><strong>Sharma</strong></td>
</tr>
<tr>
<td><strong>Sikh</strong></td>
</tr>
</tbody>
</table>

Note: All values are significant at p<.001**
Following this approach we tested mediation effect of shopping behaviour on the relation between subjective ethnicity and store choice (Table 4.6).

Results indicate that shopping behaviour mediates subjective ethnicity and store, and same happens in case of gender and ethnic groups.

4.14.15.1 Sobel Test

Fritz and MacKinnon (2007) reviewed and evaluated numerous methods utilized in various studies for testing statistical significance of mediation. Their review of mediation studies conducted between 2000 and 2003 revealed that Baron and Kenny (1986) approach was most widely recognized approach. But this approach has two major limitations. First, is the situation in which mediation may occur even when the original X-> Y association is not significant. Such situation is referred to as “inconsistent mediation” where the mediator acts as a suppressor variable (MacKinnon, et. al., 2007). Secondly, this approach had relatively low statistical power among other methods (Fritz and MacKinnon, 2007)

There are several methods to test significance of mediation. One of the more robust methods to assess the significance of mediation is using Sobel test.

In Sobel’s test the null hypothesis is Ho: ab = 0. To set up a z test statistic, an estimate of the standard error of this ab product (SEab) is needed. Sobel (1982) provided the following approximate estimate for SEab.

\[
SE_{ab} = \sqrt{\frac{b^2 s_a^2}{a^2 s_b^2} + \frac{a^2 s_b^2}{b^2 s_a^2}}
\]

Where, a and b are the raw (unstandardized) regression coefficients that represent the effect of X_1 on X_2 and the effect of X_2 on Y, respectively;

S_a is the standard error of the a regression coefficient;

S_b is the standard error of the b regression coefficient.

\[
z = \frac{ab}{SE_{ab}}
\]
Table 4.7: Sobel test on mediated relationship

<table>
<thead>
<tr>
<th>Subjective</th>
<th>Shopping</th>
<th>Store</th>
<th>Mediaion</th>
<th>Behaviour</th>
<th>Choice</th>
<th>Sobel</th>
<th>P value</th>
<th>Mediation</th>
<th>Significant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main</td>
<td>Subjective</td>
<td>Shopping</td>
<td>Store</td>
<td>Independent</td>
<td>Ethicitty</td>
<td>Behaviour</td>
<td>Mediation</td>
<td>Sobel Statistics</td>
<td>P value</td>
</tr>
<tr>
<td>Male</td>
<td>Subjective</td>
<td>Shopping</td>
<td>Store</td>
<td>Ethicitty</td>
<td>Behaviour</td>
<td>Choice</td>
<td>2.12</td>
<td>0.02</td>
<td>Yes</td>
</tr>
<tr>
<td>Female</td>
<td>Subjective</td>
<td>Shopping</td>
<td>Store</td>
<td>Ethicitty</td>
<td>Behaviour</td>
<td>Choice</td>
<td>2.18</td>
<td>0.04</td>
<td>Yes</td>
</tr>
<tr>
<td>Mahajan</td>
<td>Subjective</td>
<td>Shopping</td>
<td>Store</td>
<td>Ethicitty</td>
<td>Behaviour</td>
<td>Choice</td>
<td>2.98</td>
<td>0.03</td>
<td>Yes</td>
</tr>
<tr>
<td>Muslim</td>
<td>Subjective</td>
<td>Shopping</td>
<td>Store</td>
<td>Ethicitty</td>
<td>Behaviour</td>
<td>Choice</td>
<td>1.98</td>
<td>0.04</td>
<td>Yes</td>
</tr>
<tr>
<td>Rajput</td>
<td>Subjective</td>
<td>Shopping</td>
<td>Store</td>
<td>Ethicitty</td>
<td>Behaviour</td>
<td>Choice</td>
<td>2.37</td>
<td>0.04</td>
<td>Yes</td>
</tr>
<tr>
<td>Kashmiri</td>
<td>Subjective</td>
<td>Shopping</td>
<td>Store</td>
<td>Ethicitty</td>
<td>Behaviour</td>
<td>Choice</td>
<td>2.11</td>
<td>0.02</td>
<td>Yes</td>
</tr>
<tr>
<td>Pandit</td>
<td>Ethicitty</td>
<td>Behaviour</td>
<td>Choice</td>
<td>3.13</td>
<td>0.01</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sharma</td>
<td>Subjective</td>
<td>Shopping</td>
<td>Store</td>
<td>Ethicitty</td>
<td>Behaviour</td>
<td>Choice</td>
<td>2.17</td>
<td>0.02</td>
<td>Yes</td>
</tr>
<tr>
<td>Sikh</td>
<td>Subjective</td>
<td>Shopping</td>
<td>Store</td>
<td>Ethicitty</td>
<td>Behaviour</td>
<td>Choice</td>
<td>2.65</td>
<td>0.02</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Ethicitty</td>
<td>Behaviour</td>
<td>Choice</td>
<td>3.41</td>
<td>0.01</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

z value greater than +1.96 or less than −1.96 indicate product to be significant. Sobel test has good statistical power (Fritz and MacKinnon, 2007). Table 4.7 provides results of Sobel test.

Results from Sobel test and Barron and Kenny approach ascertain that shopping behaviour works well as mediator (because of significant t value) for the relationship between subjective ethnicity and store choice. So, in the present study the proposed model has shopping behaviour as mediator.

4.14.16 Descriptive statistics:
The subjects focused in the study were youth in three age categories (18-22 yr, 23-26 yr and 27-30 yr), belonging to families having income in the range of Rs 2,50,000 to Rs 10,00,000. The income brackets were designed in three categories (Rs. 2,50,000 to Rs. 5,00,000; Rs. 5,00,000 to Rs. 7,50,000; and Rs. 7,50,000 to Rs. 10,00,000). The subjects
selected for the study were consumers who shop at both traditional and modern retail stores, and live in urban area in Jammu region (Appendix 4.1).

4.14.17 Multi-dimensionality:

The multidimensional scale followed the procedure designed by Nunnally (1969), Churchill (1979), and Campbell and Fiske (1959). From the results it was predicted that subjective ethnicity (cultural intelligence, emotional intelligence, practical intelligence, culture self, and ethnic identity), store choice, and shopping behaviour are multi-dimensional as shown in Appendix 4.10.