CHAPTER II

METHOD

This chapter outlines the methods and procedures utilized in the present study. Details provided in this chapter include the design of the study, the procedure of recruiting participants for the study, and description of the instruments used to collect the data. The chapter is organized under the following sections:

1. Key Terms

2. Research Questions

3. Objectives

    a. Broad Objectives

    b. Specific Objectives

4. Variables

5. Research Design

    a. Pilot Studies

    b. Phase 1 and phase 2 of the Study

    c. Sample and Sampling Techniques

6. Tools for Data Collection

7. Procedure for Data Collection

8. Plan of Analysis

    a. Quantitative Analysis

    b. Qualitative Analysis

    c. Validity and Reliability Issues

Key Terms

Self Regulation: The ability to change oneself and exert control over one's inner processes is known as self-regulation (Vohs & Baumeister, 2007). Self-regulation is characterized as having three component parts (Carver, 2007):

1.   Establishing a goal

2.   Engaging in actions that lead to obtaining this goal

3.   Monitoring progress towards the goal

Purchase Behavior: The behavior of spending money on tangible or intangible goods, for example, clothes, electronic goods and movies or vacation, respectively. People on an everyday basis engage in buying behavior for fulfilment of their necessities. The following features are associated with it:

    a) Need Based Buying: purchase of tangible/intangible goods for fulfillment of necessities of everyday living.

    b) Leisure Based Buying: purchase of tangible/intangible goods which are for ease and relaxation.

    c) Luxury Based Buying: purchase of tangible/intangible goods for comfort, quality and artistic value. For these buying, demand increases proportionally as the income rises.

d) Super-Luxury Based Buying: purchase of tangible /intangible goods for artistic value and less utility. For instance, purchase of yachts, luxury cars and artistic treasure paintings/ creations.

e) Situation Based Buying: purchase of tangible/intangible goods as per the demands of the situations. For instance, purchases made to accommodate one better for a high altitude vacation. Or, purchases made during a wedding in the family.

f) Culture Based Buying: purchase of tangible/intangible goods the demand for which is passed on from the culture/context that you live in. For instance, purchase of *mangal-sutra* is completely directed by the culture for a Hindu married female.

g) Primary Buying: purchases made for oneself or purchases which will be consumed by the self only.

h) Secondary Buying: purchases made for consumption of others in the family or friends.

Primary Purchase Capacity: The capacity to earn and spend money on one's own, without being dependent upon others for one's monetary needs.

Research Questions

1. What is the understanding about self-regulation and self-regulation of purchase behavior in the contemporary Indian urban middle class context?

2. What are the beliefs and behaviors related to purchasable goods of necessity or luxury types?

3. What are the differences in self-regulation due to gender, age, marital status, income, and presence of child/children?

4. How do individuals navigate the process of decision making for purchase behavior in Indian urban middle class families?

Objectives

Broad Objective

The broad objective of the study is to identify individual differences in behavior and practices indicating self-regulation or failure of it, in relation to purchase behavior among people with primary purchase capacity.

The specific objectives of the study are:

1. To find out individuals' beliefs related to self-regulation.
2. To know individuals' beliefs related to self-regulation of purchase behavior in terms of need-based or luxury-based goods or services.
3. To find out the relation between materialistic values, buying motives and self-regulation.
4. To know the manifestation of self-regulation of purchase behavior in impulse buying and compulsive buying.
5. To determine how gender, age, marital status, income and presence of children impact self-regulation related to purchase behavior.
6. To understand the process of purchase behavior.

Variables

Independent variables: Personal Demographic variables (age, gender, marital status, number of children, education, monthly income), Types of Purchase (Usual purchases, Extraordinary

Purchases), External Factors (like type of profession, type of family, employment status of spouse, constraints [time, money, avenue of purchase], and control by family [parents, child] and friends/significant others).

Dependent variables: Self-regulation of Purchase Behavior and Internal Factors (Materialistic Values, Impulse Buying, Compulsive Buying, Buying Motives).

Research Design

A mixed-methods approach where researcher combines both quantitative and qualitative research techniques, methods, approaches, and concepts was adopted. The purpose of mixed methods is to draw the strengths and reduce the weaknesses of each of the methods in a single research (Johnson & Onwuegbuzie, 2004). In particular, the study adopted QUAN →QUAL method with sequential analysis. For the quantitative research, a survey method was adopted. For this purpose, a questionnaire was developed to measure self- regulatory practices of individuals across different age groups. Additionally, standardized rating scales were used to assess select aspects of purchase behavior. For the qualitative enquiry, an open-ended interview schedule along with vignettes was prepared to describe and understand the process of purchase and the factors, which influence the same.
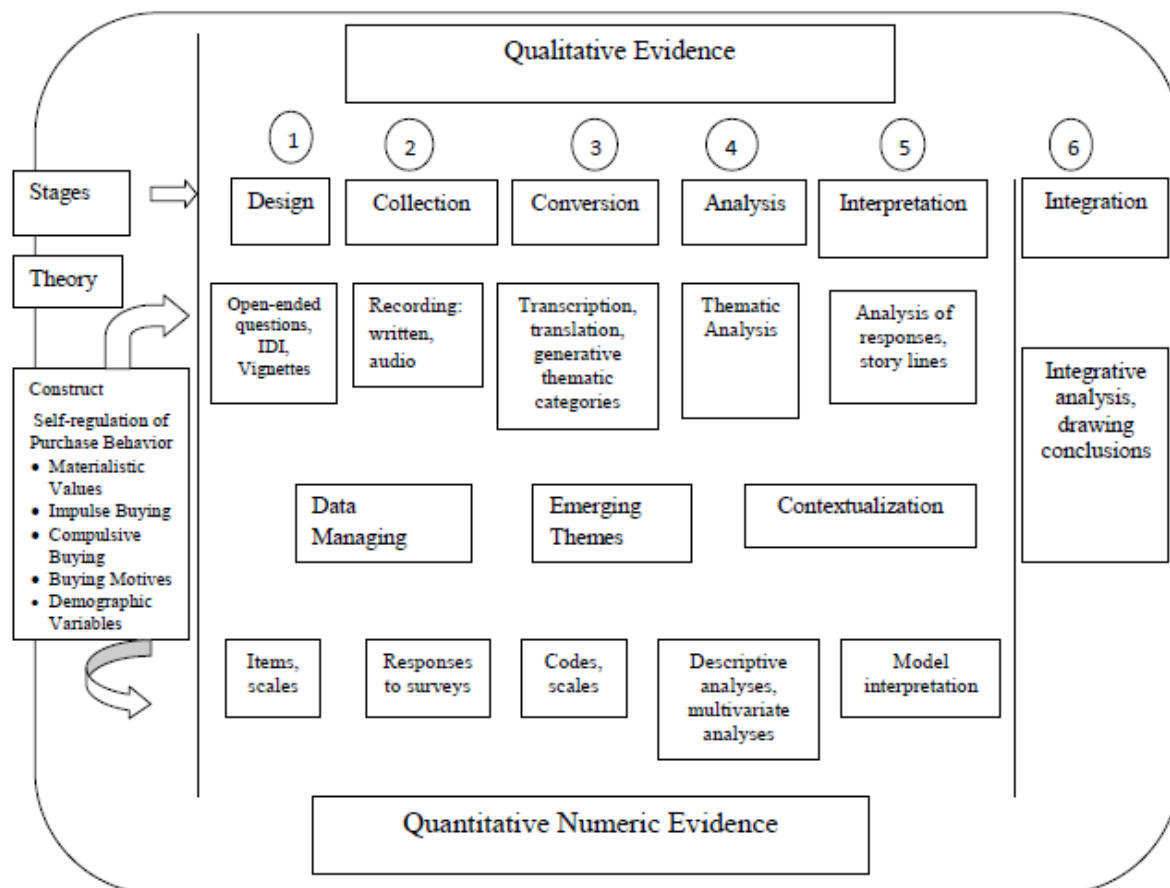
Figure 3 *Mixed Methods Research Stages*

The framework for the research is presented in Figure 3 along with various stages as per the mixed-method Quan → Qual research method paradigm.

Pilot study.

The initial phase of the research focused on developing a tool for measuring the occurrence of phenomenon of self-regulation with respect to various domains of purchase behaviour. For this purpose, a questionnaire was developed with items pertaining to the main domains of self-regulation of purchase behaviour namely Self-gifting, Impulse buying, and Compulsive buying. This questionnaire was peer-validated and field-tested with 15 participants. Necessary changes in the items were made and the tool was prepared for pilot-study. A pilot

study with 15 participants was conducted. Necessary changes were made in the tool such as adding items for assessing self-gifting and impulse buying. A pilot study with 150 participants was conducted. Analysis of the study revealed the following issues:

1. Factors of self-regulation were not completely covered in the items and the tool was more appropriate to study consumer behavior rather than the self-regulation of it.

2. Standardization of the tool: The reliability and validity of the tool prepared were not established. Norms for interpretation were not determined.

Based on the feedback from the pilot and the content validation, a stronger reference to the conceptual framework was made and the select items from the tool were retained for the final questionnaire. The narratives from the open-ended questionnaire were utilized to frame the vignettes and questions on interview schedule. Further, already existing standardized tools pertaining to self-regulation of purchase behavior were searched for. The next step was to assimilate the tools and also to add the items retained from the earlier tool. The final tool was a combination of 5 scales, 4 vignettes, 1 in-depth interview schedule and 1 open-ended questionnaire. The tool for phase-1 of the study comprising of open-ended questionnaire and 5 scales was peer validated by 15 experts in the field of Psychology, Human Development and Education. Later, it was transliterated in the local language, that is, Gujarati and a back-translation was done. The tool was field tested with 20 participants. Finally, the tool for data-collection was ready for the phase-1 of the study i.e. the survey. The vignettes and interview schedule were preserved for phase-2 of the study.

The study was conducted in two phases which are described below.

Phase I.

Phase I involved conducting the survey with 300 participants in different life stages who had primary purchase capacity.

Phase II.

The second phase focused on the experiences and processes entailed in purchase behavior as described by the individuals with primary purchase capacity. For the purpose, 4 different vignettes were prepared and peer validated. Furthermore, an interview schedule was developed to understand the phenomena in depth and in detail. The interview schedule was peer-validated and field tested with 6 participants and necessary changes were made. This was the tool for conducting in-depth interviews with the participants. The phase II of the study was conducted with 30 participants who scored low or high on the self-regulation questionnaire administered in phase I.

Sample and Sampling Technique.

Sample.

The participants of the study included individuals in the age range of 22-60+ years segregated in 7 categories who were financially self-dependent and hence had the primary purchase capacity.

The four categories are Early Adults (21-30 years), Adults (31-40 years), Middle Adults (41-50 years), and Late Adults (51+ years).

Table 1 presents the rationale for selecting the sample.

Table 1

Sample and Rationale

Participants	Rationale

Why individuals with primary purchase capacity?	The purpose is to understand the self-regulation of purchase behavior, for which it is necessary that the participants have a source of income of their own, by means of a job, a business, investment etc.
Why individuals across the age range?	To find out the life stage changes in self-regulation and purchase behaviour.
Why individuals who are unmarried and married? Likewise, why individuals with and without children?	Information from this group will place the phenomenon in context as it will report the experiences as per the needs and demands of the different life stages and how purchase behavior differs across these variations.
Why equal representation of men and women?	To capture the voices of both genders and to compare the impact of the phenomenon of self-regulation of purchase behavior on both groups in context.

Sampling technique.

Purposive sampling technique was used to identify prospective participants.

Process of identifying the participants.

The participants were contacted through various workplaces in Baroda, such as Banks, University, Hospitals, Private Clinics, District Court, Schools, Preschools, etc. A few participants were contacted through residential societies and NGOs. Moreover, they were informed that the interview for the second phase of the study would be scheduled at any time and place they felt appropriate.

Sample size and distribution.

Sample Size and Distribution (N=330)

Phase 1 (n=300) Phase 2 (n=30)

Table 2

Demographic Details of the Participants in Phase 1

Sr. No.	Age Range	Frequency	Male	Female
1	21-30	94	34	60
2	31-40	78	43	35
3	41-50	59	24	35
4	51+	69	43	26
5	Total	300	144	156

Table 3

Details of the Participants in Phase 2

Level of Self-regulation	Male	Female
High	9	7
Low	6	8
Total	15	15

Tools for Data Collection

1. Demographic Form: Age, gender, education qualification, profession, monthly income, total family monthly income, marital status, presence of children, type of family, spouse working etc. (self-developed) (Appendix A).

2. Materialistic Values Scale: Developed by Richins and Dawson (1992) and revised by Richins (2004), it is the "most widely used and psychometrically validated measure of

materialism in consumer research" (Wong et al., 2003, p. 74). Adults rated these statements

on a 6-point Likert-type scales, ranging from strongly disagree (1) to strongly agree (6).

Coefficient alpha was reported for 32 data collections. Alpha ranged from 0.77 to 0.88 with a

mean alpha of 0.85. The mean alpha for each of the subscales was 0.77 for the success

subscale, 0.73 for the centrality subscale and 0.75 for the happiness subscale. (Appendix B).

3. Consumer Impulsiveness Scale: The Consumer Impulsiveness Scale (CIS) (Puri, 1996) is a

factor-analytically derived measure. It consists of 12 adjectives, 7 of which constitute the

prudence subscale and of which constitute the impulsive or hedonic subscale. Participants

rate the extent to which the adjectives describe themselves on a seven-point Likert scale (1=

usually would describe me, 4 = sometimes would describe me, 7 = seldom would describe

me). Seven of the 12 items are reverse-scored. Representative prudence items include "Self-

controlled," "Restrained," and "Responsible." Items on the hedonic subscale include

"Careless," "Easily tempted," and "Enjoy spending." The CIS demonstrates adequate

criterion and discriminate validity based on data from two different samples ($n = 75$ and $n =$

93). Puri (1996) found that individuals who score in the direction of impulsiveness (i.e., who

receive high scores on impulsiveness and low scores on prudence) indicated that they would

spend more money on a tempting but unnecessary purchase than their prudent counterparts.

(Appendix C).

4. Edward's Compulsive Buying Scale: Edwards Compulsive Buying Scale (ECBS, Edwards,

1993): Based on the scale of Faber and O'Guinn (1992), this instrument was developed to

determine just how compulsive individuals are in their buying behaviour. Tested and

validated on a sample of self-identified individuals with compulsive buying (N=104) and on a

healthy comparison group (N=101), the original 29 items were reduced as a result of the

exploratory factor analysis. The remaining 13 items load on five factors: 'Tendency to

spend', 'Compulsion/Drive to spend', 'Feelings about shopping and spending',

'Dysfunctional spending', and 'Post-purchase guilt'. Items are scored on a 5-point Likert scale. The compulsive spending scores (grand total) represent the mean average of all items and is regarded as an underlying continuous variable. (Appendix D).

5. Scale for measuring Buying Motives: Developed by Dittmar and Kapur (2011). Buying Motives Scale is an 18-item scale to be rated on Likert's six-point scale ranging from strongly disagree to strongly agree. The four factors assessed are utility, quality, identity and emotion, The correlations between the four factors and the acquiescence measure, in order, were 0.34, 0.27, 0.23, and 0.18, with $p<0.001$ for the first three and $p<0.01$ for the last correlation. Utility and quality correlated strongly, $r=0.61$, $p<0.001$, as did identity and emotion, $r=0.67$, $p<0.001$, and quality and identity, $r=0.41$, $p<0.001$. The association between quality and emotion was weaker, $r=28$, $p<0.001$, and mildly negative between utility and emotion, $r=−0.14$, $p<0.10$. (Appendix E).

6. Self-regulation Questionnaire (SRQ): Developed by Brown, Miller, & Lawendowski, (1999). Test-retest reliability for the total SRQ score was high ($r = .94$, $p < .0001$). Internal consistency of the scale was high ($\alpha = .91$). (Appendix E).

7. Open-ended Questionnaire (self-developed): The questions focused upon percentage of expenditure, savings, percentage of monthly amount spent on self, on family, on need-based usual purchases, on exceptional luxury purchases etc. (Appendix F).

8. Interview schedule (self-developed): The questions were based upon self-regulation, cultural and conceptual understanding of self-regulation, self-regulation of purchase behavior, process of decision making for exceptional and usual purchases etc. (Appendix G).

9. Vignettes (self-developed): Each vignette presented specific circumstances participants were asked to reflect upon these and share their reasons behind certain decisions with respect to purchases made in the circumstances and the process thereby. (Appendix H).

Content validity for self-developed scales.

The self-developed tools for Phase 1 and 2 were content validated by experts from the fields of Human Development and Family Studies, Psychology, Anthropology, Sociology and Education. The following feedback was received:

☐☐Both the questionnaire and the interview guideline were found to be exhaustive.

☐☐More explicit probes on factors related to buying behavior were added in the interview schedule.

☐☐Other suggestions included restructuring certain questions to improve comprehension and reordering items in the rating scale.

Based on the suggestions, necessary changes were made in the tools. Before finalizing the tools they were field tested again with 10 people across different age groups. The questions were easily understood by all participants, but they found the tool slightly lengthy to complete. They also found the topic to be interesting for themselves and wanted the researcher to explain what she meant by "self-regulation of purchase behavior". It became necessary to clarify that it is their concept, ideas, feelings and practices about different types of purchases that they made for themselves primarily, therefore they are free to report their views, and that there are no right or wrong answers to these questions. Further, it is not about what *others think or feel* but about what *they think and feel* about the phenomenon under study.

Objectives, Tools and Domains.

 Table 4 presents the objectives, tools, nature of data obtained from each tool.

Table 4

Objectives, Tools, and Domains

Sr. No.	Objectives	Method	Measures		Data Obtained	Analysis
1	To know individuals' beliefs related to self-regulation.	Survey + Vignettes and In-depth Interviews (IDI)	a.	Open-ended questionnaire	Attitudes and beliefs related to self-regulation of purchase behavior	Thematic Analysis
			b.	Vignettes and In-depth Interviews (IDI)		
2	To know individuals' beliefs related to self-regulation of purchase behavior in terms of need-based or luxury-based goods or services.	Survey and Vignettes and In-depth Interviews (IDI)	a.	Materialistic Values Scale (MVS): major domains of success, centrality, and happiness	a) Scores on MVS b) Scores on Buying Motives c) Open-ended questionnaire and Vignettes and IDI to sketch the actual practice of purchase and savings	Correlation, Multiple Linear Regression Analysis, Thematic Analysis,
			b.	Scale on Buying Motives: major domains of utility, product quality, projected identity and emotion regulation		

			c. Open-ended questionnaire d. Vignettes and IDI		
3	To find out the relation between materialistic values, buying motives and self-regulation.	Survey	a. Materialistic Values Scale b. Scale on Buying Motives c. Self-regulation Questionnaire: major domains of Receiving, Evaluating, Triggering, Searching, Formulating, Implementing, and Assessing.	Processes of actual purchases made and how they are made	Correlations, Multiple Linear Regression Analysis, Thematic Analysis
4	To know the manifestation of self-regulation of purchase behavior in	Survey	a. Consumer Impulsiveness Scale: major domains of Prudence and Hedonic Value	Scores on Impulse buying and Compulsive Buying for understanding	Correlations, Multiple Linear Regression Analysis

			b. Edward's Compulsive Buying Scale: major domains of Tendency to spend, Compulsion to spend, Feelings about spending, Dysfunctional spending and Post purchase guilt. c. Self-regulation Questionnaire	the mechanism of self-regulation of purchase behavior	
impulse buying and compulsive buying.					
5	To determine how gender, age, marital status, income and presence of children impact self-regulation	Survey + Vignettes and In-depth Interviews (IDI)	a. Self-regulation Questionnaire b. Vignettes and IDI	Scores from SRQ and responses from Vignettes and IDI to track actual process of purchase behaviours with respect to	Multiple Linear Regression Analysis, MANOVA

	related to			life stages	
	purchase				
	behavior.				
6	To understand the process of purchase behavior.	Vignettes and In-depth Interviews (IDI)	a. Vignettes and IDI	To determine Impulsiveness/ Compulsivity regarding purchases – both indicators of failures of SR	Thematic Analysis

Procedure for data collection.

As mentioned earlier the participants were contacted through various workplaces of Baroda, viz. Banks, University, Hospitals, Private Clinics, District Court, Schools, Pre-schools, Yoga Centres, etc. A few participants were contacted through residential societies and NGOs.

Phase I: The participants were contacted and informed consent was sought from them. Once they agreed to respond to the questionnaire, the survey form was given to them. The researcher made sure to communicate to the prospective participants that confidentiality and their 'privacy' will not be breeched and that they were free to withdraw from the survey anytime they felt uncomfortable or simply chose not to answer any question which they found indiscreet. On an average, the survey form took about 30 minutes to complete. Once the form was filled, it was checked for any double responses or missed responses and verified

with the participant. The form was collected back and a serial number was assigned to each form. In some cases, the survey form was given to the respondent to be filled at home in their spare time and the form was collected the next day.

Participants' reflections during data collection.

Most participants found the questionnaire interesting but quite lengthy. They reported that they had not given a thought to such questions and it was interesting to learn about their own thoughts and they could write a lot on the subject. They found that they were never very conscious about the way they spent money. However, some older participants reflected upon the value that money is losing as days are passing with inflation and economic difficulties. They shared about giving in to the urges of buying instead of controlling themselves as an afterthought to their actions over the past years. Most female participants reflected upon how the survey form was an eye opener for them and that they were spending most of the money for the family and yet bearing the guilt. It was difficult for the researcher to pursue the participants to open up and give their financial details. Some participants were adamant about not filling the details. For this reason, 87 uncompleted forms (with no detail of monthly income and monthly family income) were not included in the data. The initial sample size of 400 for the survey was thus reduced to 300 participants.

Phase 2: For the second phase of the research, participants with low and high score on SRQ were contacted over the phone and their appointment was taken for conducting the IDI. The responses to vignettes were almost spontaneous and participants shared interesting reflections. Many of them were amused to think about their own purchase patterns and they were quite excited to talk about these.

Plan of Analysis

Quantitative analysis.

☐☐Means and standard deviations for all domains (material values, impulsive buying, compulsive buying, buying motives, self-regulation and all their domains) of the rating scales were computed.

☐☐Pearson's correlations were used to find out the relationships between self-regulation and each study variable (material values, impulsive buying, compulsive buying, and buying motives).

☐☐Multiple Linear Regression Analysis was used to find out the impact of each study variable on self-regulation.

☐☐MANOVA was used to find out how materialistic values, impulse buying, compulsive buying, buying motives, and self-regulation differ by personal demographic variables and external factors.

Qualitative analysis.

The unit of analysis is "utterances" of the participants from in-depth interviews and notes of respondents from the questionnaire. The data from each participant were viewed as a whole. Each complete verbatim describing a particular attitude was coded by interpretation of utterances by placing them in context of life stages, social and cultural dimensions under categories (interpretative perspectives) and the same verbatim was coded under several categories at times. As the categories got filled with "data" and each category was properly characterized, the investigator looked for the frequency of occurrence of each perspective in the different groups of participants. This was done so as to get the total picture as well as to make inter-group comparisons between gender and age (Maxwell, 1996).

The aforementioned outcomes were accomplished by employing the following:

1. All the interviews were transcribed by the investigator.

2. All the transcripts and respondent notes from the questionnaire were digitized by the investigator.

3. It was possible to assign whole verbatim to different codes and refine the coding process as more and more codes where included in particular categories.

4. The verbatim quotes were then retrieved under the codes along with their sub-codes and frequencies, and exported to excel files in order to create figures and graphs.

Validity and reliability

Strategies for ensuring validity.

The following strategies were employed to eliminate validity threats:

a. Member Checks: During the process of interview systematic feedback was sought from the participants. The interviewer narrated the interview highlights back to the participant, using her own words to check whether the meaning of what was being said was rightly understood by the investigator. In case of disagreement, clarification was sought immediately. For the data from open-ended questionnaires in the form of respondent notes, clarification was sought telephonically in case of any ambiguity or doubt.

b. Triangulation of sources: The data were collected from a cross-section of the society using both qualitative and quantitative methods.

c. "Rich" data: The interviews and open-ended questionnaire were dense with information revealing a detailed picture of participants' beliefs and attitudes.

d. Searching for discrepant evidences: Each complete verbatim describing a particular attitude was coded under categories (interpretative perspectives) and while looking for the frequency of prevalence of these perspectives in the data, unique cases were also documented (Maxwell, 1996).

Inter-coder reliability.

To check the inter coder reliability, 10% of the total data were independently analyzed by two coders. One coder was the investigator herself, and another coder was an expert in the field of Human Development and Family Studies. The percentage agreement was established after analyzing the coded information for agreement and discrepancies. The discrepancy in coding, if any, was sorted by mutually agreeing and retaining the most suitable code for the number of responses within that code thereby arriving at Cohen's Alpha of 0.8.