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# Playing the Price Game! An Exploratory Study in Retail In-Aisle Consumer Decision Making.... Or Why Consumers Really Walk-Away 

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A thesis submitted in fulfillment of the requirements for the Degree of Master of Research $10^{\text {th }}$ October 2016

## STATEMENT OF CANDIDATE


#### Abstract

I, Smitha Nair, hereby declare that the work in this thesis entitled "Playing the Price Game! An Exploratory Study in Retail In-Aisle Consumer Decision Making.... Or Why Consumers Really Walk-Away", is my own work and has not been previously submitted for a degree nor has it been submitted as part of requirements for a degree to any other university or institution other than Macquarie University.


I, also certify that the thesis is an original piece of research and has been entirely written by me. Any help and assistance that I have received in my research work and the preparation of the thesis have been appropriately acknowledged.

I also certify that all information sources and literature used in the thesis are indicated.

This research is approved by the Macquarie University Ethics Review Committee, Reference Number: 5201600139 on $211^{\text {st }}$ April 2016


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## ACKNOWLEDGEMENTS

This thesis has been a great experience to work on. This was an intense period of hard work and knowledge gaining which brought out the best in me. This thesis has imparted great knowledge and improved my skills in the field of research.

I would like to thank Professor Scott Koslow without whom this project wouldn't have been possible. I thank him immensely for the constant guidance and support, motivation, encouragement and faith he had in me, that gave me the strength to sail through this project.

I would also like to thank Professor Alison Pullen for her valuable guidance and support.

I would like to thank all the participants who participated in this study for their co-operation and patience.

I would like to take this opportunity to thank my family and friends for being the strength of my life.

Smitha Nair


#### Abstract

In this era of self-service shopping, the retail industry is witnessing intense competition like never before. Retailers are continuously improving their in-store shopping experience to attract more customers to sustain in this competitive market. Even though online shopping market is rapidly growing, consumers still prefer to shop in-store as they can feel, touch and check the product. In the past, research has been done to understand the consumer choice and decision making, but this research seldom focuses on the aspect of in-aisle choice process of consumers and their non-purchase decision about products in retail stores. The present study explores this gap in the literature by using eye-tracking glasses to understand the in-aisle consumer decision making while purchasing products in a real store environment.

This study is exploratory in nature and uses eye-tracking technology to understand how a consumer shows choice behavior in the store. Eye-tracking glasses tracks the eye movements of shoppers as to which shelf and which product in an aisle they are having a look at and which part of the product package they are interested to look at. The aim of the study is to understand in-aisle consumer decision making, choice behavior and walk-aways from shelves. This study is conducted in a pharmacy and green grocery store. The present study uses both qualitative and quantitative methods to form a theory. This study collects data using video, interview and questionnaire. This study uses a grounded theory approach.

It has been found that consumers look at brand name, price and product description of the product in pharmacy store. A majority of the consumers don't look at the ingredients and directions while buying medicines, as they trust the pharmacist. In a green grocery store, shoppers look at the product and price with more focus on choosing the vegetables and fruits carefully. Consumers' walk- away from pharmacy and grocery shelves if they don't find the brand of product on the shelf or the price of the product is perceived to be expensive by consumers. This project suggests consumer in-aisle choice processes involved in in-aisle choice behavior generating in-aisle consumer decisions to purchase or not to purchase products in a pharmacy and green grocery store.


This project contributes theoretically by providing the reasons behind walk-aways, which has largely been introspective, and non-academic in nature, and suggesting a consumer choice process integral to in-aisle choice behavior generating decision-making of purchasing products encompassing real time shopping in a real environment. This project also
contributes methodologically by using both quantitative and qualitative methods to understand in-depth about consumer decision making which has only been in quantitative form in the present literature. Thus, consumer's in-aisle choice process differs from store to store and more research needs to be done with a large sample of population and in different types of retail stores to get a better understanding of complex consumer in-aisle choice behavior and decision-making.

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## CHAPTER 1: INTRODUCTION

The retail industry is growing at a steady pace in Australia and offline retailers are facing stiff competition from new international entrants and online shopping, which has reported an annual growth of $16.2 \%$ in 2011-2017 (IBISWorld 2016; Retail 2016). There is a fear that retailers who don't have an online presence will have to face obsolescence in coming years. This is far from true as Amazon, the largest online retailer in the U.S., opened its first offline store, to create awareness and attract more customers for providing seamless and good customer in-store experience to boost their online shopping (Walsh 2016). Retailers are trying out new retail strategies to persuade consumers to buy products in-store. Some of the retailers are providing click and collect facility to consumers, so that while coming to collect products in-store, most of the consumers end up buying additional products from in-store (ACRS 2015).

However, some of the studies show that there is still optimism for offline retailers in Australia as in-store shopping is still the preferred channel for many Australians. According to a recent study conducted by Oracle, showed that Australians are still preferring and appreciating the in-store experience over their German (57\%), French (54\%) and US (50\%), counterparts (Blackman 2015). According to a study by Levine (2015), reported that $80 \%$ of health products and $75 \%$ of supermarket shopping are done in-store by Australians and 63 percent of Australians research a product once or more online before buying it in-store (Thumm 2016). Consumers prefer in-store shopping because they want to feel and touch the product, have instant gratification and in-person staff engaged in helping them make a final decision (Blackman 2015).

Understanding and enhancing the retail consumer experience is proving to be vital to bring them back to the physical stores again. Consumers spend a lot of time inside the store searching for products, analyzing them and exhibiting different behaviors. Studying these behaviors is important in order to understand whether the retailers are meeting the consumer needs. Practically, there is very few research on in-aisle behavior (Kalnikaite, Bird \& Rogers 2013). Those researchers who focus on in-store sales tend to focus on product outcomes of inaisle choice rather than the process of in-aisle choice (Dhar, SK \& Raju 1998; Swait \& Erdem 2002). Also, the scanner panel data sets show the product consumption shopping patterns of consumers, which is the result of the choice outcome, on weekly basis (Koslow \& Tellis 2011). Hence, there is a need to understand in-aisle consumer behavior and consumer decision making
to retain in-store consumers. Thus, this project aims to study consumer responses to retail shelves in a pharmacy and green grocery shops. This study is exploratory in nature and is conducted using eye-tracking glasses.

Consumers who come to the store to shop have different needs and are there for different tasks such as to purchase specific pre-planned products or to explore the shelves or compare different products, etc. Each consumer shows different behavior based on the product they are intending to buy and hence studying consumer behavior in different stores is important. Moreover, each consumer has distinctive shopping behavior and this cannot be seen or entirely understood by just interviewing them from outside the store, as they themselves are unaware of their own behavior in the store. Hence, it is essential to view and understand consumers shopping behavior in detail without disturbing their event of shopping. An eyetracking glass provides an opportunity to capture this real moment inside the store. This project uses Tobii eye-tracking glasses, which enable the researcher to track eye-movements of consumers during their shopping in the store. This technology helps to understand where the consumers are looking and how they are behaving while being at a shopping. The entire consumer shopping experience comes alive through these eye-tracking glasses. Figures 1-18 in Appendix A, shows the pictures of how an eye tracking glasses looks like and how it tracks the eye movements of consumers.

## Purpose of the project and Research Question

The purpose of the project is to understand the consumer decision making in purchasing products in retail pharmacy and green grocery shops, understanding their choice behavior like which aisle and shelves the consumers focuses on, which products they are interested on having a look, and what part of the package they are interested to read, and the reasons behind why consumers choose not to buy products from the shelf (e.g., walk-aways) in retail shops. This project asks the following questions:

1. Descriptively how do consumers make decisions to purchase products in retail shops?
2. What underlies the choice behavior of consumers in the retail product selection (especially visual attention)?
3. What are the reasons behind non-purchases (e.g., walk-aways), which never shows up in scanner panel data sets in retail shops?

## CHAPTER 2: LITERATURE REVIEW

Consumers prefer supermarkets that are more appealing, based on their choice of retail format wherein they have all the essential categories of products as per their need to buy from. This will reduce shoppers' frequency of shopping trips and save their valuable time (Bhatnagar and Ratchford, 2004). There have been previous studies by authors Donovan et al. (1994); Sherman, Mathur and Smith (1997) which investigate the influence of store environment on consumers emotional states and the effect of these emotions on consumer buying behavior. Aspects of store environment and its influence on consumer purchase behavior have also been studied. These studies exhibit that a good store environment can induce positive influence on the emotional state of consumers, which leads to a positive purchase behavior. Cognitive factors have an effect on selection of store for purchasing products and unplanned buying. These studies show that a good in-store environment can create arousal, which helps to increase the time spend and product purchase of consumers in the store. Thus, retailers should realize that consumers should have pleasure while shopping to increase the sales of products. Retailers should take care while designing store atmosphere that multisensory store atmospherics with aspects such as visual, auditory, olfactory, tactile, and gustatory, have individual as well as combined influence on consumer perception(Spence et al. 2014). Moreover, a store environment with good store elements such as music, layout, light and employees can induce impulsive urge triggering impulse buying behavior in shoppers. The store layout has an important role in stimulating impulse buying behavior(Mohan, Sivakumaran \& Sharma 2013). Consumer perception about instore shopping experience differs from that of retailers. Consumers still associate their in-store experience to traditional beliefs such as adequate selection of products, good layout and good service personnel (Bäckström \& Johansson 2006). However, these previous studies examined the influence of store environment on consumer behavior and their purchases, but they failed to capture how the consumer responded to the store environment once they were inside the store, as the behavior was studied once they had completed with their shopping and not during their shopping. The present study has captured consumers' actual in-store shopping behavior.

### 2.1 Cross-shopping and retail formats

Some of the previous studies link shopping behavior to retail formats. One of the studies depicts that consumers are inclined towards cross shopping between stores which
have diverse retail formats based on the perception that products with a certain retail format is favorable than the other. This behavior decreases if consumers find their entire good quality product requirement with a retail format. Cross shopping is not much prevalent among households with high economic status(Hino 2014). Another study shows how cross shopping is hindered. Format loyalty is an important part of consumer shopping behavior, as consumers generally don't transit away from their main store to another store, as they are quite habitual to the store precise knowledge of assortment, layout and price. If the consumers transit, it would be to the same price format (Rhee \& Bell 2002). Consumers' preference to different retail price formats (EDLP and HILO) is based on their price expectations for a product category. EDLP stores own a large segment of large basket shoppers and HILO stores have a greater segment of small basket shoppers who are ready to pay higher than average prices (Bell \& Lattin 1998). Consumers shop in all retail formats based on assortment of products and promotions than price. Consumers shop in different formats based on their requirements and does not indulged in substituting one format with another (Fox, Montgomery \& Lodish 2004). Previous studies showed contradictory view about cross-shopping behavior and influence of retail price format on consumer purchasing behavior.

### 2.2 Shelf layout

Several studies show consumer behavior in different store and shelf layout. Gu and Liu (2013) examines that retailer makes a decision about its shelf layout based on market demand and channel power and implement different shelf layout formats inside the store for different categories of product with diverse fit probabilities. A retailer keeps products, which are competing with each other and with high fit probabilities in same location on a shelf and contending products with low fit probabilities in distant locations. Consumers' belief about shelf layout is entirely different from those of retailers. For example, consumers believe that popular brands are allocated at the central position of the shelf, which is not the case in actual scenario. Due to this difference in belief, consumer finds it difficult to locate products and hence the shopping experience becomes frustrating (Valenzuela, Raghubir \& Mitakakis 2013). Griffith (2005) conducted an experiment on store layout and its influence on online retailing and found that tree-structured layout was perceived by consumers to be easier to use, favorable for product information and purchase intentions. Consumer's proximity to another consumer in the same
shelf can have positive or negative impact on their emotional state which effects consumers' purchase intention, shopping experience and aversive behavioral tendencies (Luck \& Benkenstein 2015). Studies have been done on online store layout examining the consumer behavior and their influencers in online retailing, but there are only few researches done studying the offline in-store layout and its influence on consumer behavior. Each aspect store layout and shelf layout was studied differently in previous studies. Consumer in-aisle behavior and its response to shelf layout and product positioning need to be studied, which would give a better picture about consumer perception about the shelf layout that in turn would aid to have a good store layout.

### 2.3 Consumer choice and decision making

There are previous studies that have examined consumer decision making in terms of choice. Studies show that consumer changes its choice of purchasing product if an offer is available on luxury product of high price and quality (Simonson 2005). A theoretical model have been outlined which shows choice environment, and individual complexity to make complex decisions have an effect on consumer choice (Swait \& Adamowicz 2001). Consumers are spoilt with choices in some product categories. In such a situation, consumers have a problem with choice due to abundant availability of alternatives. Judgement and choice problems comprise of comparisons which consumer as a decision maker need to make (Simonson et al. 2013). On the contrary, choice deferral occurs when there is absolute difference in attractiveness among available alternatives and consumers hesitate to commit to a single alternative due to uncertainty (Dhar, R 1997). In such a scenario, consumer makes a decision whether to purchase a product or not to purchase and this decision precedes before the selection of the product stage (Dhar, R \& Nowlis 2004). When the required products gets sold out, consumer quickly makes a decision to purchase available products, reducing the chance of choice deferral $(\mathrm{Ge}$, Messinger \& Li 2009). It has been found that consumers take less time and effort in making decision regarding purchasing of everyday products. The organic shoppers take less time to shop than conventional shoppers (Thøgersen, Jørgensen \& Sandager 2012). When the product goes out-of-stock on the shelf, it influences consumer's decision making whether to buy, what to choose and the quantity to be purchased from the category (Campo, Gijsbrechts \& Nisol 2003). Other factors that influence consumer decision making in aisles are price, health, environmental and societal. These are the product information that the shoppers evaluate while making purchase decisions. Now-a-
days, before making one-off purchase decisions, consumers check online customer star ratings and review of the store (Kalnikaite, Bird \& Rogers 2013). A delay in consumer decision making occurs when there is a substitute available, consumers need time to acquire more information, waiting for prices to fall, product improvement, unpleasant shopping and due to uncertain need (Greenleaf \& Lehmann 1995). Online shopping environment has decision aids which are interactive and enables the consumers to quickly search product information on the website and make appropriate product purchase decisions (Häubl \& Trifts 2000). These studies only showed how decisions were made based on available choices and choice deferral. However, they did not investigate how and on what bases the product was selected. One needs to understand why the consumers are not buying products.

### 2.4 Scanner Panel data

Study of scanner-panel data provides insight into household choices and consumer purchase decision making. This source of information gets enhanced when other aspects such as price, media creatives, ad content are associated to the choice preferences and consumer decision making. Scanner panel data reveals consumer shopping patterns and their choice and brand preferences (Koslow \& Tellis 2011). Studies on scanner panel data show that consumers buy products based on promotion leading to increase in sale and some consumers buy products in bulk during promotion and post promotion there is a dip in store sales (Van Heerde, Leeflang \& Wittink 2000). The households which has high income are less price sensitive than the large households and the households that often visit the store (Ainslie \& Rossi 1998). Consumers prefer buying the brands of products that they have already used and found to be good, thus averting the risk of buying unfamiliar brands whose experience is uncertain. When consumers form a positive set of perception about the attributes of products, which they have already used, along with good brand advertisement dissemination in different media by the organization, it results in the positive image of brand among consumers leading to brand loyalty. Moreover, some consumers in order to avoid uncertain choice of alternatives, prefer using familiar brands over time generating brand loyalty (Erdem \& Keane 1996). These studies showed the product outcome in terms of choice and consumer preferences, rather than focusing on inaisle choice behavior. Consumers do prefer familiar brands, but the uncertainty related to unfamiliar brands is not stopping them from experimenting and buying these brands.

### 2.5 Information Processing

Consumers undergo complex information processing in their brain before they take a decision. Attention plays an important role in productive consumer decision making and a consumer makes a final decision based on complex interactions between consumer memory, stimuli, preferences, choice and attention (Orquin \& Loose 2013). Consumers rely on different information source before making a purchase decision about a specific product. The source includes their very own knowledge, advertisements, magazines, reviews, feedback and product experience of other customers who had purchased it and customer service provided by the store. The preference of the information source depends on the specific product the consumers are intending to buy (Kline \& Wagner 1994). Consumers process all the information coming from advertisements by quickly grasping it and considering its claim to be true unless this information is challenged by further investigation and found to be false (Koslow \& Beltramini 2002). When consumers are overloaded with information, it hampers their information process, which confuses them and results in making them take poor decision regarding the choice of products. The availability of different alternative choices helps in decreasing the load of information processing among consumers (Malhotra 1982). Although these studies showed different aspect of consumer choice behavior, but it lacked the actual vision of how consumer looks at different available choices and their behavior pertaining to these choices. There is also a need to study that, to what extend the information gained before entering the store about the product has an influence on in-aisle consumer choice behavior while purchasing products in the store. Even though consumer gains information, they still analyze the products in the store before finally making a decision of purchasing it and thus, this behavior of consumers' needs to be studied.

### 2.6 Choice Behavior

Consumers' knowledge, attitude towards risk, quality and price are the important determinants of consumer choice of store brand (Erdem, Zhao \& Valenzuela 2004). Frustration during purchase process can have an effect on consumer choice behavior (Strebel, O'Donnell \& Myers 2004). These studies concentrated on the choice outcome as product, but failed to capture the consumer exhibiting choice behavior in a real environment.

Consumers of different countries have different decision-making style and culture has a role to play in this decision making. Consumer preference to retail environment, inventory, shopping pleasure and shopping behavior differs from country to country and the level of brand selection, brand loyalty depends on culture of different countries (Lysonski, Durvasula \& Zotos 1996). Price discounts on products, brand name, brand quality has an influence on value perceived by the consumers. Store image and the perceived value together influences consumer's purchase decisions (Grewal et al. 1998).

### 2.7 Eye-tracking literature

Eye-tracking technology is quite advanced today, wherein the measurement of eye movement is very precise and is being used in various fields of study. Back in 90's, the technology was in evolving stage of its development and still was used in many studies. In one of the earlier study by authors Krugman et al. (1994), eye-tracking was used to investigate audience reaction to new and existing warnings in cigarette advertisements. In this study, measurement in terms of masked recall was done to establish the relation between cognitive processing of audience with eye-tracking data. Eye tracking measurement data of warning contents showed significant relation to masked recall. In another study, eye-tracking technology was used to understand how an advertisement characteristic of yellow pages motivates consumer information processing behavior. This study led to a way of understanding how people acquire information from a telephone directory by recording their eye movements as they scan the yellow pages and found that audiences spend more time on viewing advertisements with high information and of businesses they eventually select (Lohse 1997).

Eye tracking literature review by Wedel and Pieters (2008) shows that previous eye-tracking research studying eye movements in marketing has focused on stimulus characteristics such as size, color, text, position of brand leading to measures related to visual attention with less focus on its effectiveness of visual marketing and factors influencing consumer attention; concentrating more on print advertisements with little focus on other visual marketing impetuses such as shelf design and layout, product packages and brand etc.; measuring fixation time, frequency, gaze duration etc. with less understandability of small metrics such as consumer time and space. A previous study found that brand element of the print advertisement of a product receives more eye-fixations than text and pictorial elements. Repeated exposure of
advertisements in short interval and appropriate advertising context leads to good audience brand memory retrieval (Wedel \& Pieters 2000). This study shows that more a consumer is exposed to a brand through information dissemination, better the chance of recollection of that brand while purchasing a product. The salience of brands has an effect on the consumer search performance and they use only one or two features to search the product rapidly(Van der Lans, Pieters \& Wedel 2008). Even superior pictures gain more audience attention in advertisements while increase in text size increases the amount of attention gained from audiences, although brand transfers its effects on other elements of the advertisements (Pieters \& Wedel 2004). Consumers process information with a goal orientation and when consumers focus is on brand learning, increased attention is paid on text than pictorial element, while in case of ad memorization process attention is paid in sequence to text, pictorial and brand (Pieters \& Wedel 2007). Audience attention on feature advertisement with different design can produce different sales outcome and the design which yields best outcome should be found through testing and should be implemented to increase sales of the product (Zhang, Wedel \& Pieters 2009). In a recent study, eye-tracking data was used to understand how consumers gain information about attributes of products in online environment to devise a decision on acquisition strategy to be selected for switching. Eye movements were tracked and found that horizontal and adjoining movements have a role in acquiring information (Shi, Wedel \& Pieters 2013). Complexity of features in advertisements can have bad effect on brand attention leading to adverse effect on brand equity, whereas design complexity increases visual attention of consumers (Pieters, Wedel \& Batra 2010).

Majority of the studies conducted with eye-tracking technology in marketing have been in advertising. There are very few studies conducted in the field of retailing using eye-tracking technology. There are few studies, which have used the technology to understand online store behavior of consumers in online shopping, but there is little study done to understand how a consumer behaves inside the offline store and how a consumer decision making takes place inside the store environment. The present study used advanced eye-tracking technology to understand this gap in literature. The present study used the eye-tracking technology to track the eye movements of consumers to understand their decision making while selecting the products from the available choice of alternatives and to understand the decision of not purchasing any products from the store.

## CHAPTER 3: RESEARCH METHODOLOGY

The methodology used in this study is grounded theory. Grounded theory is a general method, with a set of methodical procedures, that helps develop a theory from data. The theory is a set of relationships that provides a depiction about a phenomenon under study (Strauss \& Corbin 1990). According to Strauss and Corbin (1998, p. 32), in grounded theory, quantitative data can also be used for theory building, in addition to qualitative data. Hence, this study used both qualitative and quantitative data to build a theory. This study was based on primary source of data. The data collection methods used for collecting qualitative data was videos and interviews and the quantitative data was collected through survey method. The instrument used for conducting the survey was Questionnaire.

The study was exploratory in nature with two stages; the first stage was collection of raw data using Tobii eye tracking glasses and the second stage of the study included a survey of the participants with a questionnaire and interviewing them. The eye tracking technology used in the study allowed the researchers to track and video record the eye movement of the consumers. The video captured all the moments from the consumers entering the store till they were out of the store after finishing their shopping. When the consumers were in the store, they looked around different shelves for products. It allowed the researchers to understand where the consumers were looking at before selecting the product, whether they were looking at price on the shelves or brand name, ingredients, instructions and directions on the product package or whether they were interested in looking at offer tags and so on. The entire consumer shopping was recorded from inside the retail shop using the Tobii eye tracking glasses.

The second stage of the study involved a survey of the above participants with a questionnaire. The survey was conducted after the participant finished his/her shopping in order to understand their decision making about purchases, choice behavior and walk-aways. A brief semi-structured interview was also conducted with the participants and their interview was recorded, in order to have a detailed understanding of their in-aisle choice behavior and decision making.

This study was predominantly empirical with an interpretivist flavor.
In this project, consumer thinking was interpreted to understand how they made a decision to select a product, their choice behavior, non-purchases from the shelves and walking away from
the store. Moreover, this project also compared their decision-making and behavior with what they said in a simple questionnaire and this could be observed via the eye-tracking glasses.

The study was conducted in a pharmacy and green grocery store. The pharmacy store provided a simple and in-depth understanding of the shopping behavior. The pharmacy store was chosen as it offered a perfect environment to have an in-depth study and understand in-aisle consumer decision-making process. The atmosphere at pharmacy is not as chaotic as compared to other department stores. Moreover, the store has limited space, which helped in tracking the live video of eye-movements. The consumer behavior differs from store to store. The consumers who are in a pharmacy store behave differently than being in the green grocery store. Green grocery shopping being an essential need, consumers has a different outlook towards the green grocery store. The information processing differs in these two stores and hence it was interesting to study how these behaviors differ.

The questionnaire and interview questions had been designed to understand more about consumer decision-making process inside the retail store. In this study, 7point Likert scale was used to measure behavior with 7 signifying strongly agree and 1 signifying strongly disagrees. The questionnaire had 20 questions, which the participants had to checkbox based on their interpretation about their behavior, purchase decision making, non-purchases, liking of the store, and understandability of shelf layout in the store. A copy of the questionnaire has been placed in Appendix E. There were 7 interview questions, which had been designed to understand about their choice behavior and decision making in purchasing or non-purchasing of a product. A copy of interview question has been placed in Appendix E

In this study, a sample size of 100 participants has been collected, wherein sample of 80 participants was collected from pharmacy store and 20 participants was collected from green grocery store. All the participants were above 18 years of age. Participants have been representative of the Australian population. Participants included both men and women. The data were collected through video, interview and questionnaire. Each participant contributed towards one video, one interview and one questionnaire and hence in all there were 100 videos, 100 interviews and 100 questionnaires.

### 3.1 Procedure for data collection

The consumers, who entered the store and were without glasses, were approached for participation in this research study. The consumers who agreed to participate were briefed about the research and the participant and consent form. They were made aware that the participation is voluntary and could withdraw any time during or after the participation of the research study. This study has got ethics approval from the University ethics panel. The participants were informed that the data collected would stay anonymous and preserved securely. The participants were briefed about the eye-tracking glasses, interview and questionnaire. The duration of the study was informed.

The participants who gave consent and signed the participation and consent form were requested to wear the eye-tracking glasses and then the participants' eyes were calibrated. Those participants whose eyes couldn't be calibrated were not considered for participation in the study. This was conveyed to the participants. The participants, whose eyes got calibrated, entered the store and did their regular shopping. The eye-tracking glasses captured the complete duration of the shopping when the participants were in the store. Once they were out of the store after their shopping, the video was shown and the interview questions were asked. After the interview, the participants were given the Questionnaire and were requested to indicate their behavior from strongly disagree to strongly agree on the Likert scale.

### 3.2 Data Analysis

The analysis of data collected from the pharmacy store was done separately from that of the grocery one. Grounded theory was applied to both the data and theory was formed separately. The interviews and video data were analyzed using open coding, axial coding and selective coding. Open coding involves breaking, comparing, conceptualization and labelling of data. The group of concepts relating to the same phenomenon were categorized (Strauss \& Corbin 1990, p. 61). In axial coding, the categories would be refined and relationship between categories and sub-categories would be established with the coding paradigm. The coding paradigm offered by (Strauss \& Corbin 1990) includes- causal conditions, central phenomenon, context, intervening conditions, action/ interaction strategies, consequences. The central phenomenon refers to the interactions between different people that revolve around the study, what causal conditions contribute towards the occurrence of the development of the
phenomenon, context refers to the time, duration and place, intervening conditions are the environment, action/ interaction strategies are the course of action, which leads to consequences. In selective coding, core category is a central phenomenon of the study to which all the categories would be related. According to Strauss and Corbin (1990, p. 116), selective coding is "the process of selecting the central or core category, systematically relating it to other categories, validating those relationships and filling in categories that need further refinement and development." The selecting coding finally integrates all the categories to form a theory.

The interview data were transcribed and open coded where the transcripts were read line by line and data that describes a phenomenon at its best were conceptualized and labelled. According to Strauss and Corbin (1990); Xiao et al. (2004), in grounded theory approach, the same procedure for video analysis can be followed as with interviews or observations. During open coding with video recordings, abstract categories based on analysis from each participant behavior and decision making were formed. Each video recording has the complete sequence of events of behavior that took place once the participant went inside the store to shop. Each participant's behavior was closely studied, how they made the decision to select after looking at products on shelves and the decision to walk away from the shelves and from the store. The entire video is one story about the participant's in-aisle choice behavior and decisionmaking, which cannot be interpreted by studying only the video in parts or sections. In order to understand what participant's do in the store, each and every second of the video was studied closely. Each participant's choice behavior and decision was compared with their interview as interview questions were based on their behavior in the store. Integrating the categories from video recording with the categories of open coding from the interview during the axial coding stage to find relations between the categories (Strauss \& Corbin 1990; Xiao et al. 2004). In axial coding, the interview and video categories were compared, refined and relationships among different categories were formed. In the selective coding, the categories would be integrated to form a theory. In this study, video, interview and questionnaire provides data, which cannot stand on its own. Each method, whether it is a video or an interview or questionnaire, they rely on each other to provide a meaningful interpretation.

## Context and intervening

 conditions(The store and its products)

Causal Condition
(Need for the
consumer to
purchase a product)

Phenomenon
$\underset{\text { decision making) }}{\text { (In-aisle consumer }} \longrightarrow$


## Consequences

(Purchases or Nonpurchases, Decision been made)

## Action/ interaction <br> strategies

(Evaluating before selecting the products, before coming to a decision)

Figure 19 : Axial Coding (Strauss \& Corbin 1990)

### 3.3 Analysis of Quantitative Part of the study

The questionnaire data was analyzed with SPSS software using exploratory mode of analysis. The questionnaire was a seven point Likert scale with 7 signifying strongly agree and 1 signifying strongly disagrees. Exploratory factor analysis was performed for data reduction i.e. reducing the number of variables. Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and Bartlett's test of Sphericity was performed. The responses in the sample were adequate and acceptable with KMO greater than $0.7(0.830)$ and the Bartlett's test led to a significance below 0.05 , which means correlation matrix is not an identity matrix. For the analysis, the extraction method used was principal components and eigenvalue greater than 1 was considered to extract the factors. The scree plot showed distant break after the fifth factor where the slope of the curve levelled out. Thus, a five-factor model was fit. Varimax rotation was performed to get interpretable factor loadings. Varimax rotation assumes independent factors that reduce the number of variables for which there are high loadings. The factor model showed an explained variance of $72 \%$. Table 4, Appendix C, shows the factor loadings of each variable in rotated component matrix. The rotated component matrix shows the factor loadings of each item against the five factors and the factor where each item was strong could be identified in Table 4,

Appendix C. These factors were labelled and the regression method was used to extract the factor scores. Details about the factors can be found in Chapter 4, Research findings, Interpretation of Results of Quantitative part of the study section.

It was noted that three of the five factors represented behaviors that could be observed in the eye-tracking videos. Thus, the construct underlying three of these five factors were independently coded, resulting in 3 new variables. Eye-tracking video interpretations were coded in binary form ( 0 and 1 ), and the three new variables called (actual values) were labelled. In keeping with the exploratory nature of the analysis, the coding was done by the author and was not validated by a support service.

SAS system was used to analyze the newly formed "actual values" variables. Logistic regression model was used to describe the relationship between categorical "actual values" and predictor variables from the factor analysis. Here, the categorical variable is the binary coded variable and the predictor variable is the factor score. Predicted probabilities were obtained from logistic regression and predicted values were coded in binary form. The predicted values and actual values of categorical variables were compared by performing cross tabulation descriptive statistics using SPSS software, in order to summarize the relationship between the two variables. The output from logistic regression and cross tabulation tables can be seen in Appendix C.

## CHAPTER 4: RESEARCH FINDINGS

The first part of the chapter is an overview of the table that describes and discusses the eyetracking video analysis and interview of each participant. In the next two sections, categories and sub-categories formed from a pharmacy and grocery store has been described. After this, there is a section on interpretation of results of a quantitative study and then findings from a pharmacy, grocery and quantitative study has been discussed in detail.

### 4.1 Overview about the Table with Description and Discussion about Eye-tracking video and interview analysis

The Table 1 in the Appendix B was formed as an outcome of the analysis and comparison of each participant's video with the participant's interview. The summary of the video analysis of each participant has been described in the table. The choice behavior and decision making in purchasing and non-purchasing products in the video was compared with the interview to interpret about the reason for their behavior and decision making. Column 1 and 2 in the table is about Shopper number and the Store in which their behavior was recorded. Column 3 is about the purchases and non-purchases of products by the participant. Column 4 is the summarized description about the behavior shown by the participant in the store in the video. Column 5 is the description based on comparing how consumer behaved in terms of choice in the aisle of the store and what they had to say about their behavior in the store in an interview. The table gives detailed information about what purchases were made by each participant, what all shelves did the participants walk-away, what all products bought were unplanned and finally whether he/she walked away from the store. The table describes the details of the products including the brands bought by the consumers, what all parts of the product package they had a look at and how they selected a product. Consumers prefer popular brand of products, especially in case of cosmetic products in pharmacy stores. We can see from the table that shoppers looked at the brand name, product description, price, ingredients, and directions on the product package. Each consumer follows a different pattern of looking at products. The pattern is formed based on consumer's convenience and ease of grasping product information, analyzing and comparing with other products. In case of green grocery store, the consumers mostly looked at the price and the quality of the product, whereas in pharmacy store, consumers were focused on brand name, price and product description. Some of the consumers showed their interest in looking at the
ingredients and directions. All the consumers in the green grocery store had their own method of analyzing whether the vegetables or fruits were good. Consumers bought the product based on their need and some had monthly budget allocated to their green grocery, due to which they came in with a list, while others made the decision to buy once they saw the product. In pharmacy, medicines were brought based on need and prescription, whereas cosmetic products were bought based on sale price and brand.

### 4.2 Store 1: Pharmacy store

| Core Category | Main Category | Sub- categories |  |  |
| :---: | :---: | :---: | :---: | :---: |
| In- aisle consumer decision making | Choice behavior | Information processing before selection of products | Looking at brand name | Familiar Brand |
|  |  | Selecting unplanned products | Looking at price | Unfamiliar Brand |
|  |  | Exploring shelves | Product Description | Price shame |
|  |  |  | Ingredients, Instructions \& Directions |  |
|  |  |  | Brand Conscious |  |
|  |  | Price comparison with different stores | Price Conscious |  |
|  |  | Walk-away from shelves | Online Reviews and <br> Recommendations |  |
|  | No choice Behavior | Walk-away from store |  |  |

Table 2: Core category, Main categories and sub-categories of pharmacy store

Table 2 shows the core category, main categories and the sub-categories of pharmacy store, which is the result of the data analysis, performed using grounded theory. The core category is the central category around which all other categories and sub-categories are related. The core category in pharmacy store is in-aisle consumer decision making. The two other main categories are choice behavior and no choice behavior. The 6 sub- categories are information processing before selection of products, selecting unplanned products, exploring shelves, price comparison with different stores, walk- away from shelves and walk-away from stores. All these 6 sub-categories have 4 common further sub-categories, looking at price, looking at brand name, product description, ingredients, directions, instructions. The subcategory information processing before selection of products has further sub-categories, which are brand conscious, price conscious, online reviews and recommendations. The further subcategory brand conscious has further sub-sub-category, which is familiar brand, further subcategory price conscious has further sub-sub-category, which is price shame, further subcategory online reviews and recommendations has further sub-sub-category, which is unfamiliar brand. The main category no choice behavior has two sub-categories, which are walkaway from shelves and walk-away from store.

## Core category- In-aisle consumer decision making

Consumer in-aisle decision making is the core category, which is about the in-aisle decision making process in pharmacy store that the consumer goes through while shopping in the store. It is about the decision whether to buy the product or not and to come to this conclusion consumers show in-aisle choice behavior or in-aisle no choice behavior.

## Main Category - Choice Behavior

The choice behavior category describes about how a consumer makes choices as to which product needs to be selected and which need not to be. Choice behavior of a consumer ultimately leads to a final decision regarding the selection of a product. When the product selection has been made, it leads to purchase of that product. The choice behavior is based on a process, which the consumer undergoes while carrying out selection of products. There are different categories that have been defined which are a part of choice behavior. These different categories are different choice process adopted by different consumers. The choice process that the consumer follows
depends on the characteristic of consumer's nature and based on this their choice behavior differs.

## Sub-categories:

## Information processing before selection of products

It is about how the consumers analyze and compare products based on brand, price and product description. The consumers do in-depth analysis of the available brands of products on the shelves and finally decide which product to select. Some of the consumers particularly look for ingredients in different brands of a product, if they have a sensitive skin before deciding which brand of product to select. This is true for medicines as well, as some of the consumers do analyze before selecting it. For cosmetic products, consumers generally look for colors that match their skin tone, and color becomes one of the major components for selection, other than brand and price. Consumers have pre-determined notions about brand, price and this influences their selection process. Some consumer research about products online before coming to the store and many of these consumers enter the store with an intention of buying a particular brand of product. Participants describing about their selection of products as;

Example:
"I was just checking that the foundation color matched my skin tone and stayed on my skin."
"I was comparing the price, number of tablets for cold and flu tablets and for BP machine, the features on each machine."

## Further sub-categories:

## Brand conscious

Those consumers, who are brand conscious, buy the products of the brands they are aware of. Brand conscious consumers have a good perception about a brand of product in their minds and choose products of those brands again and again. Many of these consumers in pharmacy store become brand loyal to one or more brands, stick to these brands, as they have used it before, and found to be good. These consumers are not interested in experimenting by switching to new brands. Some of the consumers in pharmacy store are brand conscious for cosmetics, but are not
for medicines, i.e. they select any brand of medicine, as they feel it should serve the basic purpose and select only branded products for cosmetics. This holds true vice versa as well. Consumers who are very brand conscious, look at the brand name first and may or may not look at price and select the product from the shelf. They don't look at other brands and their prices. Such consumers don't care about price and even though they look at price, it won't be a factor affecting their selection process.

## Examples:

"With medicines I go with brand and don't use generic product."
"I stick with the brand I usually use L'Oréal, Maybelline and Revlon that I have used before"
"For cosmetic products I prefer brand more than for medicines as anything which is cheap for medicines can do."

## Further sub-sub-category

## Familiar brand

Consumers who are very brand conscious about a product and are quite familiar with the brand, select the product after looking at the brand name or skip the brand name and just look at the price or select the product based on the package design. Such consumers are very quick in picking product from the shelf, as they are familiar with the brand package as well.

## Example:

"I knew the one I always get; just choose the brand which I was familiar with."
"It was the brand "clear white", I don't exactly remember the brand but I am familiar with the box because that is the same packet that I normally buy."

Here the consumer takes the wrong name of the brand, which actually is "Clear wipe"

## Price conscious

Price conscious consumers in pharmacy store are the consumers who are more focused on price than brands. They always look for the cheapest products on the shelves. Most of them don't care
for brand and buy whichever product is cheap. Some of the price conscious consumers only buy products during the sale. Some of these price conscious consumers are for branded products and buy them only during the sale. They look at the price first and then the brand name. They compare prices of products among brands and then select the one, which is the cheapest, and during the sale, they go for the cheapest among the sale products.

Example:
"I am price savvy and look at price before quality."
"Looked at reduced price and bought the products based on offers."

## Further sub-sub- categories

## Price shame

Some of the price conscious consumers have a tendency to hide the fact that they have bought the products on sale or low price. They feel buying the product on sale is a shameful thing and don't want others to know that they have selected the products from sale. Price shame is associated with the perception of consumers that using sale products means low social status.

## Online Reviews and Recommendations

Consumers check the online reviews about products they are intending to buy. Consumers generally check the online reviews if they are planning to purchase a new product or planning to switch from existing brand. They analyze about the product before they enter the store. Consumers are recommended by doctors to purchase a brand of product and then based on this recommendation they select the product. Consumers buy cosmetic products based on suggestions and recommendations from friends, video on You-Tube and Facebook by experts.

## Further sub-sub- categories

## Unfamiliar brand

Consumers select a product of unfamiliar brand if the existing brand of product is unavailable on the shelf and they urgently need it, if the existing brand is expensive and want to switch to a
cheaper brand. Consumers look at product description, ingredients in detail before selecting the product, which is of unfamiliar brand.

## Selecting Unplanned products

The products selected by consumers, which were not planned, are called unplanned products. These products were not on consumer's mind or list when they entered the store. Consumers buy unplanned products in pharmacy store, if there is a sale of a product or if the product is on reduced price they buy it even if they don't need it urgently. Consumers buy the unplanned product if while looking at shelves they happen to see the product and recollect that they need it or if the selection is based on impulse.

## Examples:

"The nail scissors wasn't planned; I just thought of my nails, just saw it and got it."
"I walked past Manicare nails shapers, I remembered I need to buy it so I bought it."
"Didn't have any intention to buy and found the product in good price and bought the product right away, QV was on special."

## Exploring shelves

Consumers explore the shelves to understand what products are there on the shelves or are new and to check the brand and price of products. Some of the consumers inspect all the shelves to check which products are on sale. Some consumers explore the shelves if they could recollect if they need anything. Most of the time while exploring, consumers select some products.

Examples:
"Looked around the store to get an idea of what I may or may not need."
"I like to look around and see what's the sale, new and like looking at everything on shelf to be honest."

## Price comparison with other stores

Some consumers, who come to the pharmacy store, check the price of the brand of products they need in the store. They may have visited other stores to check the price of products before coming to this store or might visit in future. Consumers who compare prices with other stores are
price conscious and visit stores to gain the information about price and once they have all the information they analyze which is the cheapest and buy from those stores. Such consumers only buy specific products and not buy many products from the pharmacy store.
"Visited another store and couldn't find it cheaper and came to this store to check something can be found."

## Main Category- No choice Behavior

No choice behavior is the stage where consumers have no option left but to make a decision that they won't buy anything from the pharmacy store

## Sub-categories

## Walk-away from shelves

Consumers walk-away from the shelves in a pharmacy store, if the product they need is not available on the shelf, price is high, the brand is unavailable, or the brand of product is out-ofstock. Consumers who explore the shelf to gain information about products also walk-away from the shelves. Some consumers who come to the store to check prices of products and compare with other stores tend to walk-away from the shelves. Consumers who walk-away from one shelf may end up buying some other product from another shelf.

## Examples:

"Didn't have the brand that I want so for the skin cream."
"Looked at the shelves and didn't buy as I don't need it and bought whatever I needed, just having a browse wasn't really essential."

## Walk-away from store

Consumers walk-away from the pharmacy store, if the store doesn't have the specific product which they need or if the price is high or not on sale. Sometimes consumers need the brand of medicine recommended by doctors or brand of cosmetic product recommended on You-tube, and if the product is unavailable or out-of-stock, they walk-away from the store. Consumers also walk-away from the store if they come into the store to check price and compare with other stores for a specific product or if they are exploring the shelves to gain information about products,
though they don't need it. Consumers walk-away from the store if they have come to the store to buy one or two product and they don't find it in the store.

Examples:
"I came here whether they have stock for the medicine I need, but they don't have stock."
"The brand of product which we were looking were out-of-stock."

## Common further sub-categories to all sub-categories

## Looking at brand name:

Consumers who are brand conscious, they look at the brand name of the product first. Most of the consumers do look sub-consciously at the brand first, unless they are very brand conscious and recognize by package or are price conscious, but they don't realize that they have looked at the brand.

Looking at price: Consumers look at price first before the brand name of the product, if they are very price conscious. Some of the consumers who are price conscious, they sub-consciously look at the price first, even though they don't realize that they are looking at price

Product Description: Consumers look at the product description if they want to gain information about what the product does. Most consumers look at product description after brand name or after brand name and price. Few consumers look at the product description first before looking for brand name or price, as they are more focused on function or if they are buying any unfamiliar brand.

Ingredients, Instructions \& Directions: Consumers look at ingredients if they have sensitive skin. The instructions and directions are looked by some of the consumers who buy medicines and by some consumers who buy products that have some form of color, for example, hair color.
"I always look at the description, what it does rather than brand."
"For moisturizer, wasn't looking for any brand, was looking certain amount of vitamin E in it, but none of them did."

The figure 20 below shows the categories and sub-categories of pharmacy store.

Consumer choice behavior involves different choice processes. Consumers can get involved in one or more combination of these choice processes and show a choice behavior. Consumers who enter the store, they come with pre-determined notion obtained by checking online reviews and recommendations, or have the characteristics of being brand conscious, price conscious, which influence their selection process and thus select a product by both looking at the brand name, price or the product description or ingredients etc. and exhibit choice behavior. Consumers look at brand name, price, and ingredients and select a product from the shelf, which is an unplanned product. Consumers explore the shelves by looking at brand name, price, product description, ingredients and select a product from shelf leading to choice behavior. Consumers compare the products on shelves with other stores by looking at brand name, price, and product description and select a product, which leads to choice behavior. Consumers exploring the shelves and price comparing tend to walk-away from shelf, if the product has not found to be cheap as expected. Consumers who are not buying from any of the shelf or they came in to compare only one product and walked away from that shelf, or after asking staff, then in such situation, the consumer walks away from the store. Both walk-away from shelf and walk-away from store leads to no-choice behavior resulting in the decision of non-purchase of a product.

## PHARMACY



Figure 20: Relationship between categories and sub-categories in pharmacy store
4.3 Store 2: Green Grocery Store

| Core Category | Main Category | Sub- categories |  |
| :---: | :---: | :---: | :---: |
| In- aisle consumer decision making | Choice behavior | Information processing before selection of products | Looking at product |
|  |  | Selecting unplanned products | Looking at price |
|  |  | Exploring shelves | Looking /Reading information on food package |
|  |  |  | Price conscious |
|  |  | Price comparison with different stores |  |
|  |  | Walk-away from shelves |  |
|  | No choice Behavior | Walk-away from store |  |

Table 3:- Core category, Main categories and sub-categories of green grocery store
The above table shows the core category, main category and the subcategories that were formed after the data analysis of the grocery data and using the procedure of grounded theory. The core category is the umbrella category, which is the phenomenon under which the story of the study revolves. The core category of the grocery study is in-aisle consumer decision making. The main categories are the choice behavior and no choice behavior, which was formed, based on consumer decision whether to buy the product or not to buy the product. The sub-categories of category choice behavior includes information processing before selection of the product, selecting unplanned products, exploring shelves, price comparison with other stores and walk-away from shelves. The sub-categories of no choice behavior are walk- away from shelves and walk-away from grocery store. All the sub-categories have 3 common categories namely, looking at product, looking at price, looking/reading information on food package. These categories came from the video analysis. The sub-category information processing before selection of product has a further sub-category price conscious.

## Core category- In-aisle consumer decision making

This is the core category, which is the central phenomenon under study. The in-aisle consumer decision making is about how the consumer makes a final decision about purchasing or nonpurchasing a product in a green grocery store.

## Main Category - Choice Behavior

Choice behavior in a green grocery is about the choice process that the consumer follows before making a final selection of a product. Choice behavior consists of different choice processes and it depends on the consumer as to which process they would be interested to follow. Choice behavior ultimately leads to the decision to purchase of the product.

## Sub-Categories:

## Information processing before selection of products

It is about how a consumer selects individual units of products. The consumers decide whether they need to buy the product after looking at the product and price. Once the decision has been made regarding the choice of vegetables/fruits, the selection process enters the next phase, which is selecting the individual units of vegetables and fruits. This selection process is about standards that the consumers keep in order to choose vegetables or fruits. In green grocers, each consumer has a different way of choosing the vegetables and fruits. Some consumers decide to choose vegetables and fruits, if there are no marks on skin of the fruits/vegetables, green vegetables are selected based on their darkness, fruits are smelled, vegetables are checked whether they are soft or hard. Consumers who indulge in in-depth information processing are more focused on quality of product than price. One of the participants described about his selection as
"Mandarin, just look at it to see no marks or something it's alright and again for all the fruits if I don't find any marks on the skin then it's alright and you know that's the way it goes. In the custard apple you must see it is little bit soft not too hard and then again no coloration on the outside definitely."

## Further Sub-category

## Price Conscious

Some of the consumers are quite price conscious and they choose the products based on price. They first look at price and then look at vegetables or fruits. Based on price, consumers decide which product is cheaper and buy. Price becomes one of the main criteria for selecting the
product and once they make a decision, they decide to choose the individual units of products based on their standards. The criteria of price conscious consumers differ from those of other consumers while selecting green grocery, as they are not that strict with the selection criteria for selecting vegetables and fruits. One of the participants who was very price conscious said "It depends which products are cheaper I look at from seasonal basis like bananas whichever is cheaper I buy."

## Selecting Unplanned Products

Unplanned products are the products that are not on consumer's list of planned products that they intend to buy, but bought them due to price, fresh produce. In green grocery, some consumers don't plan what to buy before coming to the store and once they see that the green groceries are good and fresh they buy them. Some of the consumers have a list with them or in their mind and buy accordingly, but if they see something they didn't have it for long or it's cheap or fresh or of good quality or available or need them in near future, they buy it.

Example:
"I looked at cauliflower as I walked past it and was looking nice and I didn’t have cauliflower for a while so I bought it."
"I never have a plan what to buy, I just see and if it looks nice and fresh we buy it. Today all the products were unplanned whatever was fresh we bought it."

## Exploring shelves

Consumers explore the shelves to check the quality of the products, availability and price. During the exploration of the shelf if they see that, the green grocery is good and fresh they buy it. There are consumers who come to the store and take a round of the entire store to have an idea as to what all green groceries are good and fresh, what all are available and based on that they make a decision to select the product. Exploring the shelves makes the decision making process easy for consumers as they already know what they need to buy and move to the next level of selection process, which is selecting the individual good vegetables and fruits

## Price Comparison with other stores

Consumers compare the prices with other stores and buy the products, which are cheaper from respective stores. Consumers keep comparing prices of green groceries with other stores and if they are a frequent buyer, they know the range of price of each vegetable and fruits being offered
in different stores. Consumers don't compare quality and freshness with other stores. While they are in the store, they check the price and analyze in their mind by comparing with other store and if found cheaper they buy it. The comparison of price expertise is gained through experience.

## Example:

"I always compare prices with supermarket and vegetable market and whichever I feel cheap I buy from there."
"Ginger was cheaper here. I went to vegetable market a couple of days ago, vegetable market had it for 24.99 and here it was cheaper."

## Main Category- No Choice Behavior

No choice is the phase when consumers make a decision not to buy the product from the store. The reason for non- purchases can be non-availability of product, price, quality or freshness.

## Sub-categories:

## Walk-away from shelves

Walk-away from shelves occurs when the consumers leave the shelf without selecting any product from the shelf. Consumers who walk-away from one vegetable shelf may end up buying some other vegetable or fruit from other shelf. Consumers who walk-away from shelf in green grocery store are people who have compared price of vegetable / fruit with other store and have found this store to be expensive for that vegetable/ fruit. The other reasons for walk-away from shelves are the price of a particular vegetable/ fruit is expensive, they were at the shelf of vegetable or fruit and recollected that they don't need it this week and if the quality of the product is not good.

## Examples:

"When I picked up the cashew nuts packet but I realized it that I have it so I put it back"
"Was looking at tomatoes but it was too expensive so I didn't buy them."

## Walk-away from store

Walk-away from the store takes place when the consumer decides not to buy anything from the store. Consumers, who come to the green grocery store to buy a specific vegetable or fruit and couldn't find that vegetable or fruit in the store, decides to walk-away from the store without buying anything. Some of the consumers find the products they intend to buy to be expensive and hence decides to walk- away from the store. The decision to walk-away from the store leads to consumer making a no choice option and thus non-purchasing and walking out of the store.

Examples:
"Today the price was high so I didn't buy anything; I will come next time to buy."
"We didn't find the product that we are looking for."

## Common further sub-categories to all sub-categories:

Consumers while at store follow these categories. All the sub-categories have common further categories, which have been described as follows:

Looking at products- Consumer looks at the vegetable or fruits on shelves
Looking at Price- Consumer looks at the price tag on the shelf
Looking/ Reading of information from food package- looks at the brand name, reads calorie intake description, ingredients, expiry, preservatives etc. (dairy products, juice, etc.)
"I normally see the ingredients and carbohydrates because I am very much calorie conscious. I try to intake much as less calories I can."
"Looking at the back of the package for expiry date."
"Try and buy Australian purchase and I do look up for the sign at the package or label."
"I will first check the quality, and if it looks appealing then I will check the price whether it's competitive or not."
"I look at price first as we try to stick to a food budget so we look at the price and if it's good then we buy it otherwise 'no'."

The figure 21 shows the relationship between different categories, sub-categories and further subcategories, which have been discussed and explained systematically above.

## GREEN GROCERY



Figure 21: Relationship between categories and sub-categories in grocery store

### 4.4 Interpretation of Results of Quantitative Study

The factors that were produced due to factor analysis were labelled as (factor 1)-Shelf layout, (factor 2)-Value, (factor 3)-Packet, (factor 4)-Vulture, (factor 5)-Cheetah. The factor shelf layout comprised of items: 1) less time is consumed in selecting products, 2) shelf layout is good, 3) shopping is easy and convenient, the factor value comprised of items: 1)products being cheaper, 2) store provides better offers, 3) value for money, the factor packet comprised of items: 1) ingredients, 2 )product description, 3) instructions and directions. Factor vulture comprised of items: 1) price, 2) brand, 3) walk-away and factor cheetah comprised of items: 1) decision to purchase products in a hurry, 2) decision to purchase as soon as identified on shelves. Detailed description about the variables can be seen in Table 4, Appendix C. The factor scores of factor shelf layout, vulture and cheetah were coded to form three new variables namely First/ Frequent (buyer), Actual Vulture and Actual Cheetah. The factors shelf layout, vulture and cheetah were relabeled as Reported shelf layout, Reported vulture and Reported Cheetah respectively. Logistic regression was performed on three models, Reported shelf layout with First/ Frequent, Reported Vulture with Actual Vulture, Reported Cheetah with Actual Cheetah.

Logistic regression was done to understand whether the claim made by the consumers in interview or video of being a vulture, shelf layout or cheetah holds true against being reported in the questionnaire (comparing between actual behavior and reported one). Appendix C shows the output from logistic regression.

In the logistic procedure, initially, model fit statistics described the overall fit of the model wherein criterion with underlying measurements such as AIC, SC, - 2Log L were used to assess the model fit. The null hypothesis was tested using chi-square tests of likelihood ratio, Score and Wald to assure at least one of the predictor's regression coefficient is not equal to zero and it was found that p value $<0.001$ in all the tests in all the models and hence null hypothesis was rejected. In the next table, the analysis of maximum likelihood estimates show parameters which are predictor variable and intercept (constant), estimate (coefficients), error, chi-square statistic and p value. It was found that Reported cheetah, Reported vulture and Reported shelf layout were statistically significant with (pr>chisq) <0.001 and for Reported cheetah the (pr>chisq) was 0.0024 . Hence, in all the three cases the null hypothesis can be rejected.

In odds ratio estimate, the point estimate of Reported cheetah, Reported vulture and Reported shelf layout showed that for every one unit change in the variables, the odds of cheetah, vulture and shelf layout being non-reported increase by their respective point estimate. The $95 \%$ Wald confidence limit shows $95 \%$ confidence that the predictor variable lies between the high and low interval in the true population. Association of predicted probabilities and observed responses were obtained wherein percentage of concordant and percentage of discordant were estimated. Percentage of concordant shows that the observation with the lower ordered response value has a lower predicted mean score than the observation with the higher ordered response value. In case of cheetah, the percentage of concordant was $81.2 \%$, vulture was $81 \%$ and shelf layout was $75 \%$. Higher the percentage of concordant better is the model. Somers' D show the strength of the relation between variables. The value of gamma was greater than the values of Somers'D and the value closer to 1 shows good association between variables. If the Tau-a is less than Somers' D, there will be many pair of observations with the same response. In the case of cheetah, vulture and shelf layout, the gamma was greater than Somers'D and Tau-a was smaller than Somers'D. In logistic regression, the predicted probabilities were saved and the values were coded into binary form and labelled as predicted values. The values $<0.5$ were coded as 0 and the values > 0.5 were coded as 1 .

Cross tabulation was performed on actual values and the predicted values to understand the relationship between them. The cross tabulation tables in Appendix C, shows the cross tabulation between actual cheetah and predicted cheetah, actual vulture and predicted vulture and first/frequent and predicted first/frequent. From the table, it can be seen that $52 \%$ of the participants have said that they are not a cheetah and the responses of actual cheetah values matched with the predicted ones in 52 responses and $23 \%$ of the participants have said that they are a cheetah and the responses matched. This shows that $75 \%$ of the actual values matched with the predicted ones and for $25 \%$ of the values differed in the model. In case of vulture, $73 \%$ of the responses of the actual values matched with the predicted ones and $27 \%$ differed. Out of $73 \%$, $53 \%$ of the participants were vultures and $20 \%$ of them were not a vulture. In case of shelf layout, $66 \%$ of the participants were frequent buyers and only $4 \%$ were first times buyers. In all $70 \%$ of the responses matched in both actual and predicted values. It is clear from this fact that $53 \%$ of the consumers were vultures who looked at brand, price and walked away, if they perceived that the brand of product is expensive. Only $23 \%$ of the consumers were cheetahs wherein they make
a swift decision to purchase a product as soon as they locate it on the shelf to save time on choice process. This means $52 \%$ of the consumers took time to choose before making a decision to purchase. In case of shelf layout, $66 \%$ of the participants were frequent buyers which shows that they were well aware of the shelf layout leading to a positive response, as less time is consumed in searching products which makes their shopping easy and convenient.

### 4.5 Discussion on findings

### 4.5.1 Pharmacy Store

Consumers take a lot of time in selecting a product, if it is a vitamin supplement product or cosmetic product or if the product is bought for the first time. Females tend to spend more time and effort in selecting a product at the cosmetic aisle as they analyze the product in-depth on the basis of color (For example, buying Foundation, Lipstick), before choosing the product. Consumers look at the price of the product first before brand name, if they happen to be price conscious and if they are brand conscious they look at brand first than price. Some of the brand conscious consumers don't look at price at all. The majority of the consumers doesn't look at the ingredients of the medicine and trust the pharmacist for the product. This is because consumers generally don't understand the ingredients, unless they are doctors or nurses who look at the ingredients of medicines and other products first before brand name and price.

Consumers who are more unfamiliar with the brand look at the product description more than brand name and consumers who are familiar with the brand tend to look at price for a few seconds and make the decision of selecting the product. Consumers stock up products during sale for future use. Most of the products consumers stock up are familiar and major brand that are on sale. Consumers look at the back of the package for symbols to see if the product is cruelty free and vegan. Consumers also look at the back of the package to ascertain from where the product has been manufactured. Consumers wait for the price to be reduced, if the product is not urgently needed. If they need it urgently, they would buy it irrespective of price or compare with other stores and pick the cheapest one. Consumers sub-consciously look at price and brand even though they may not realize they are looking at it. Consumers explore shelves in pharmacy without any intention to buy and walk-away from the store. In pharmacy, consumers look at the offer tags and impulsively decide to buy unplanned products. For cosmetic products,
such as lipstick, foundation, nail color etc. consumers look at the brand name, price and color and select the product whereas for skin and hair care products consumers look at brand name, product description and price. Consumers do take recommendations from staff and select cosmetic products and medicines.

### 4.5.2 Green Grocery store

In green grocery store, the scenario is entirely different as consumers select products based on color, polished look, smell, price and freshness based on their intuition. In green grocery, consumers are concerned about both quality and price and for some consumers price precedes before quality. Some of the consumers didn't look at price as they had the notion that the products in the store were cheaper than other stores and selected the fruits and vegetables after looking at their quality. Consumers selected the packet of nuts after looking at their brand name and nuts. In case of packaged food, consumers looked at the brand name and read information on the package about preservatives, expiry, and nutritional information. Often, consumers have a rough idea about the price as they come to this store after comparing price of other supermarkets and tend to buy the ones, which are less expensive from the store in comparison with other supermarkets. Consumers walk-away from green grocery store when they came in to buy specific products and those products were either expensive or lacked freshness. In green grocery consumers look for Australian grown products, as they feel it is a kind of assurance that the product is good. Consumers have a weekly chart of food intake and do the shopping accordingly. Consumer price comparison in green grocery results in them dividing their weekly shopping of products among all the stores and buying the products that are cheaper in each store.

### 4.5.3 Comparison between Pharmacy and Grocery store

The choice behavior, decision making and walk-aways of participants in a pharmacy store differs from that of the green grocery store. In a pharmacy store, consumers are more choosy about selecting cosmetic products and comparatively less choosy about selecting medicines. Consumers are fast and choosy in green grocery store in comparison to a pharmacy, which can be observed from the behavior of consumers in selecting fruits, veggies, nuts, dairy products etc. in green grocery store. This is because consumers in green grocery tend to visit the store on weekly basis and forms a habit for selection. Green grocery is about essential necessities
and there are no large offers on products as it is seen in pharmacy stores. Although, there are brands for nuts, juices, jams, etc., but the consumers are not that brand conscious as it is found to be in pharmacy, where the consumers are after brands. In pharmacy and in green grocery, consumers are after price and try to buy products, which are less expensive. The unplanned products bought in grocery are more as compared to pharmacy and sometimes the entire shopping is unplanned in green grocery. Many consumers don't like planning for green grocery. Consumers who are walking away from the green grocery store are very less in comparison to the pharmacy store, as consumers always come to the store with a list of specific items and often end up buying most of them. Consumers always go to the green grocer with an intention to buy something. Consumers who are vultures in a pharmacy store, turns quality conscious in green grocery store, as consumer behavior changes according to store.

### 4.5.4 Quantitative Part of the Study

After the analysis, three categories of consumers have emerged vulture, cheetah and aware of shelf layout. Vulture are the consumers who are price conscious and they look at brand and price of products and walk-away from the store. Cheetahs are the consumers who are extremely fast in selecting products and they decide to select the product as soon as they look at the brand name and price of the product on the shelves. Consumers who are frequent buyers become very well aware of the shelf layout and the product positioning and hence they are able to locate the product easily on the shelf. This leads to a better shopping experience, as they feel comfortable and convenient resulting in frequent visits to the store. Consumers are very reluctant to agree that they are vultures and some are unaware of their vulturism, as their perception of being a vulture is different from reality, as 'vulturism' becomes an important constituent of their behavior. This is the primary reason to have variation in the actual and reported values in the quantitative part of the study. Some of the consumers call themselves cheetah as they feel that they are quick in making decisions to select products, but in reality, they are not. This is because they themselves form a perception that they are cheetahs and are unaware of the time spent at the aisle. Most of the consumers get engrossed in the selection process and are unaware how much time they are spending in selecting a product.

## CHAPTER 5: DISCUSSION

This study shows that in-aisle consumer decision making is about the in-aisle choice behavior exhibited by consumers. A majority of the consumers are vultures who are looking for products on low price, comparing prices and waiting for the branded products to go on sale and exploit the competition among stores to the fullest. Price comparison was the main element common in both grocery and pharmacy store. Price comparisons have become an integral part of choice behavior of consumers and they are ready to spend time analyzing the prices store to store, while some of the consumers prefer comparing online and buying in-store. Price conscious consumers who constitute vultures stock up products, when on sale for future need. Consumers have mistrust towards the retailers, as they don't trust the tag placed on the shelves in pharmacy store. Consumers look at the tag only if there is a word "sale" on it. Consumers mostly look at brand, product description and price while selecting products. Consumers look at the product description and compare products belonging to the same category and same brand, before making a decision to select, especially in case of skin care products. A lot of consumers gaze at the back of the package in the pretext of reading and keep thinking. The major reasons for walk-aways from store are product being out-of-stock and the brand of product being thought to be expensive by consumers. Consumers who walk-away from shelves look at the brand name and price of products and explore the shelves to see what products are on sale.

Consumers do look or take a glance of all the major brand names of products on the shelf even though they don't have any intention to buy major brand, before settling in with a lower brand of product. Even subconsciously, a consumer's eye move towards the major brands. Consumers mainly switch to the next major brand from a major brand as an alternative if the product is unavailable on the shelf in case of urgency. Consumers look at ingredients on the product package and videos on YouTube before buying an unfamiliar brand of product. It is evident from the video that consumers who are infrequent buyers are not well aware of the shelf layout and some of them keep searching the products in different aisle and are reluctant in requesting or accepting assistance from staff. Most of the consumers who are cheetahs enter the store by making a decision in their mind about which brand of products need to be bought and don't waste time in looking at different brand of products. Most of these cheetahs are frequent buyers and are quite aware of the shelf layout and the cheetahs who are first time buyers take time to locate the product, but once located, they swiftly select the product.

In this study, there are three categories of consumers in terms of product purchase; consumers buying medicines, cosmetic and other products and green grocery have been studied. In all these cases, the consumer needs and choice behavior differs. While selecting prescription-based medicines, consumers stick to the brand what has been prescribed by their doctors, though they change their mind and tend to switch brand, if the price of the medicine, according to them are expensive. For OTC medicines, consumers mostly stick to the brand they have used before, but consumers who are health professionals like doctors and nurses, check the ingredients and pick the cheapest brand. Consumers who buy cosmetic products take time to select products, even though they are at the store to buy the same brand of product they have used before, as they do look at other available choice of brand of products. Some of the consumers spend more than 10 minutes selecting one cosmetic product. For green groceries, consumers prefer quality and price and are choosy while selecting the vegetables and fruits based on their perception of being fresh and good. The price conscious consumers do look at price first and make a decision to buy a product, but quality is not compromised, as all the consumers in the study have found to be health conscious. In the green groceries, consumers are well researched in case of packaged food and stick to the ones they have used before and found to be good.

### 5.1 Contribution

## Theoretical Contribution:

In the past, research has been done to understand the consumer choice and decision making, store layouts, shelf layouts, but this research seldom focuses on the aspect of in-aisle behavior of consumers in retail shops. There has been limited descriptive research done on walk-aways and they are non-academic in nature. Moreover, this study tries to provide the precise event of consumer choice process and decision making that happens while shopping at a pharmacy and green grocery store, which was viewed live with the help of eye tracking glasses. Hence, this project contributes by providing in-aisle choice process that constitutes choice behavior and no-choice behavior, which results in in-aisle consumer decision making of purchasing or non-purchasing of a product. This study also suggests the reasons behind walkaways from shelves, which are the product being expensive than expected by the consumers or being out-of-stock. This research study thus contributes to academic literature

## Methodological contribution:

Most of the eye-tracking literatures are in advertising, biometrics, neuroscience, etc. There are very few studies in retailing studying in-aisle choice behavior and walk-aways using eye-tracking technology. Most of the eye-tracking studies are quantitative in nature. The present study is qualitative and quantitative in nature, uses grounded theory approach to propose a theory and thus contributes methodologically.

## Practical Contribution:

The results of the study helps retailers to better understand about in-aisle consumer decision making of purchasing and non-purchasing a product, which never has been so closely analyzed. Moreover, the results also shows the reasons behind non-purchases (e.g. walkaways), which has never been studied before. This result helps retailers manage their shelves according to consumer choices and visual attention, in addition to trying to reduce the reasons for walk-aways and increase consumer base and sale of products.

### 5.2 Implications

## Theoretical Implication:

Studies on scanner panel data provide insight into consumer choices of products through patterns of purchase and brand preferences, the effect of sale promotion on purchases and price sensitivity. However, these studies focus on consumer choice in the form of product as an outcome, but does not show the in-aisle choice process involved in consumer decision making to purchase that product (Ainslie \& Rossi 1998; Koslow \& Tellis 2011; Van Heerde, Leeflang \& Wittink 2000). Moreover, vulturism and cheetah can't be seen in scanner panel data. Conjoint analysis and experimental studies about choice are done in a controlled environment where the participants are given choices and then analyzed. These studies try to replicate the effects, thinking of consumers and manipulate things consumers actually do, but this is not the scenario of consumer behavior in real environment, which can be seen from this study (Dhar, R 1997; Ge, Messinger \& Li 2009). Survey based studies with questionnaire on choice and consumer decision making, can't define the behavior of the consumer inside the store as where they were looking and has to rely on the things said to them once they have completed their shopping (Swait \& Adamowicz 2001; Thøgersen, Jørgensen \& Sandager 2012).

Existing studies on choice and decision making show that consumers prefer luxury product if there is an offer, choice deferral, purchasing available products if the required product is unavailable. Factors that influence decision making are price, health and environmental factors, checking online reviews before purchasing, wait for the price to fall, but the findings of the present study adds on to what have been found previously (Dhar, R 1997; Ge, Messinger \& Li 2009; Greenleaf \& Lehmann 1995; Kalnikaité, Bird \& Rogers 2013; Swait \& Adamowicz 2001; Thøgersen, Jørgensen \& Sandager 2012). Consumers buy luxury brands on offers, but it would depend as how much is the offer because if the price is still expensive they won't buy it and would compare before buying. During choice deferral and product unavailability, consumers walk-away from the store, factor influencing other than price are being brand conscious, price conscious and online reviews. Online reviews are checked only for unfamiliar brand and while buying new product. Consumers do wait for the price to fall, but if they need it, they will buy it irrespective of price and stock up familiar brand of products during offers. Time spend on shopping depends on individual consumer behavior as cheetahs were found in both pharmacy and grocery store.

## Practical implication:

The different in-aisle choice process described in this study for pharmacy and green grocery store provides information to retailers about the different in-aisle choice behavior shown by consumers in the store. Retailers can replenish the stock on time in order to avoid walk-aways from store due to out-of-stock and reload the shelves properly for reducing walk-aways due to non-availability of products on shelves. Retailers should make their shelf layout simple and different aisles easily identifiable, so that consumers spend less time in searching a product. Retailers should not be concentrating more on store environment and shelf layout, as frequent buyers get habitual with the shelf layout and hence shopping becomes easy for them and consider the shelf layout to be good. Retailers should not do anything with the vultures as vultures increase their sales and make sale of products a success. Retailers should refrain from putting confusing price tags, as this leads to consumers totally avoiding the products, as they do look at brand and price before selecting a product. From this study, it is evident that, consumers are more vultures than cheetahs, hence they do spend time in selecting products, and thus cannot be fooled with different pricing strategies.

## CHAPTER 6: CONCLUSION AND FUTURE RESEARCH

### 6.1 Conclusion

This study was an exploratory research and proposed research questions in the initial part of the study. These research questions didn't change and found to be right at the end of the study. This study concludes by providing answers to all the three research questions proposed. The present study shows that consumer in-aisle decision making and choice behavior vary with different stores. Consumer choice behavior and no choice behavior have different inaisle processes, which are followed by consumers, leading to an in-aisle consumer decision making, resulting in purchase or non-purchase of a product. Consumers look at the brand name, product description, price, ingredients and directions before making a selection of a product in pharmacy store. In a grocery store, the consumer looks at the vegetables, fruits and their price and makes a decision to purchase it. The reasons for walk-away from shelves are non-availability of the product on the shelves, vulturism, and the product being expensive than expected by the consumers. Consumers walk-away from the store, if a specific product is out-of-stock or if the price of a product that the consumer is intending to select for purchase is perceived to be expensive.

### 6.2 Limitation of the study

The limitation of the study was that the sample size of 100 participants was small for quantitative study. Consumers, who had spectacles, could not be included in the sample, as their eyes couldn't be calibrated with eye-tracking glasses. Although, there were some senior citizens in the sample whose eyes got calibrated, but most of the population couldn't be included due to issues with calibration. Mothers with their babies and consumers with big shopping bags were hands full and were not interested in participating in the research study.

### 6.3 Future Research

The study can be further researched to understand measurement like the time spent by participants in selecting a product and how much time they look at the different elements of a product package such as brand, price, product description, ingredients, instructions
and directions. We need to understand more about choice behavior like how much time price conscious and brand conscious consumers look at price and brand. A sample size of 100 for quantitative study wasn't enough to determine the exact behavioral variations in vultures and cheetahs. This study should be extended to a large sample of the population to understand more about vultures and cheetahs. This study can be explored in different stores to understand in-aisle consumer decision making, as from this study it is evident that in-aisle consumer decision making differs from store to store. The present study was only based on pharmacy and green grocery store. Thus, this research needs to be extended to department store and grocery store, to study more about consumer in-aisle decision making.

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Fig 1- Eye-tracking glasses


Fig 2- Looking at product






Fig 13-Looking at the skin of the fruit


Fig 14-Looking at the price


Fig 15-Looking at the leaves and selecting



Fig 17-Looking at nutritional infomation


Fig 18-Looking at the brand name

## Appendix B

Table 1: Description and Discussion of shopper choice behavior after the analysis of video and interview

| Shopp ers | Store | About purchases and non-purchases | Shoppers' Choice Behavior | Comments |
| :---: | :---: | :---: | :---: | :---: |
| 1 | Pharmacy | Purchase: Ferro-ftab | He was browsing Vitamin and supplement aisle. He was constantly looking at brand name, price of all the products on the shelves and searching. In between the search, he picked up Iron Plus packet, and looked at the brand name and kept it back. In one instance, he stared at an empty space at the back of the packet. While browsing the shelf, he happened to see two Ferro-f-tab with sales tag. He compared them by looking at product description, ingredients, directions, distribution and selected the one that was the cheapest. | He directly went to the vitamin aisle and started browsing. He took time to search for the product, but didn't ask for assistance. He took time to think whether he can go with the cheapest one by analyzing Ferro-f-tab packet deeply. He was showing reluctance in accepting that he bought one of the cheapest products on sale. He didn't walk away from other shelves as he was in the store for a specific product |
| 2 | Pharmacy | Walk-away from store | She went directly to the Optifast shake shelf and compared the Optifast shakes and Optifast bar by product description, price, and walked away. She was browsing the shelves that had products on sale. She looked at the sale tag and brand name of products such as Nicorette Inhalator, Tresemme shampoo and Savlon cream and walked away. | She was at the store to compare price and walked away from the shelf after analyzing the products deeply. Before coming to this store, she had gone to other stores as well to check the price. |
| 3 | Pharmacy | Purchase: Systane eye drops <br> Walk- away from shelves: Betadine ointment, Colgate Toothpaste | She was looking at the sales tag of products on shelves. She walked away from Betadine Ointment, Colgate toothpaste after looking at their brand name and the reduced price tag. She compared pure moist, blink, Reclens and Systane eye drops by looking at the brand name, price and back of the package and selected Systane. Systane eye drop packet was not on reduced price while blink was. | She was at the store for a specific product and bought the product even though it was not on sale. Initially, she browsed a lot of shelves to check the products on sale and then in the end she went and selected the product Systane. |
| 4 | Pharmacy | Purchase: QV | He directly went to the moisturiser shelf and | He was in the store to buy a |


|  |  | cream | searched for the QV products and once located he <br> started looking at the product description and sale <br> tags and selected one product, which was on <br> reduced price. He didn't walk away from any other <br> shelves. | specific product. He was aware <br> of the shelf layout of the store <br> and directly went to the specific <br> shelf. He knew QV was on sale. |
| :--- | :--- | :--- | :--- | :--- |
| 5 | Pharmacy | Purchase: Liquid <br> Nurofen | He was searching for the product on the shelves and <br> when he couldn't find the product, he took <br> assistance from the staff in locating the product. It <br> was not a special price product. He looked at the <br> brand name and the dosage of the medicine. | He was here for a specific <br> product and didn't browse inside <br> the store. He didn't walk away <br> from any other shelves. |
| 6 | Pharmacy | Walk-away from <br> store | She was searching a nasal spray recommended by <br> her doctor. She searched the nasal spray shelf by <br> brand name and asked for assistance, as she <br> couldn't locate the product on the shelf. The staff <br> informed her, that the brand of nasal spray was out- <br> of-stock. She then looked at the brand name and <br> price of Swisse Bamboo Facial Exfoliant and then <br> walked away from the shelf. | She was at the store for a a <br> specific brand of product and <br> walked away from the store due <br> product. |
| 7 | Pharmacy |  |  |  |


|  |  | QV, , Centrum Advance Walk-away from shelves: Color theory eye pencil, Revlon nail color, Scholl Ballet flats | the product description, ingredients and directions of the product. She took assistance from staff to locate the QV shelf, selected a QV product after looking at brand name, and then looked at offer tag. She looked at the brand name and color of Revlon nail color, brand name and sale price of color theory eye pencil and brand name, back of the package of Scholl ballet flats, and walked away from these shelves. | then confirmed it by looking at the offer tag. |
| :---: | :---: | :---: | :---: | :---: |
| 9 | Pharmacy | Purchase: Mustela Baby cleansing Body Wash Walk- away from shelves: Avent baby bottles, Avent bottle nipples | He took assistance to locate the Baby Body wash shelf. He looked constantly at the sale tag of Mustela Baby Cleansing Body Wash and selects one of the Mustela products. He then looked at the product description, back of the package of the product, compared it with other Mustela products on sale by product description, compared it with a QV baby wash by looking at the brand name and description and finally replaced the selected Mustela product with other Mustela product, which was the cheapest on sale. He looked at the sale price tag, brand name, back of the package of Avent Baby bottles and Avent Baby Nipples, and walked away from these shelves. | He took time to make a decision about which Mustela Cleansing product he should select. He went back and forth the shelf and browsed other shelves, taking time to think as to which Mustela sale product he should buy. He was price conscious and looked at the price first before brand name. |
| 10 | Pharmacy | Walk-away from store | She was browsing the store. She was looking products and prices on all the shelves. She took a round of the store. She looked at the reading glasses, its price and walked away from the shelf. She looked at the brand name and product description of product Systane eye drops and walked away. | She was here to check prices of the products. She looked at the products that were on sale as well as the ones that got her attention. She was very swift while looking at products. |
| 11 | Pharmacy | Purchases: Schick razors, <br> Nexium 24 HR | She went to the razor section and selected Schick product after looking at the price and brand name. She went to the medicine aisle and picked | She didn't compare the products before selecting and was very quick at her decisions. She |


|  |  | Unplanned buying: <br> Nail scissors | Nexium24HR after looking at the brand name. She <br> walked away from the cosmetic aisle after browsing <br> Revlon lipstick, nail color and mascara. When she <br> saw, nail scissors shelf, she selected the product, <br> Manicare nail scissors by looking at the brand <br> name. |
| :--- | :--- | :--- | :--- |
| 12 | Pharmacy | Walk-away from <br> store | He walked away from Gillette razor shelf after <br> looking at its price and brand name. He was looking <br> at Nivea lip balm packet, but as soon as he saw the <br> sale price tag of Paw Paw lip balm, he looked <br> constantly at the reduced price tag and Paw Paw <br> packet and walked away from the shelf. |
| 13 | Pharmacy | Unplanned buying: <br> Manicare Nail <br> Shapers <br> Walk-away from <br> shelf: Shampoo and <br> Conditioner | She browsed the shampoo and conditioner shelf by <br> looking at brand name and price of Panteen, <br> Moroccan Argan oil and Tresemme shampoo <br> products. She also browsed the nail color shelf. She <br> selected a Manicare nail shapers, after comparing it <br> with two other products. The product which she <br> bought was expensive than the products she <br> compared to. |
| 14 | Pharmacy | Purchase: <br> Prescription <br> medicine <br> Walk-away from <br> shelf: Shampoo and <br> conditioner | She was here for a prescription medicine and <br> browsed inside the store. She looked at the brand <br> name and prices of shampoo and conditioner. She <br> was looking constantly at price looking at <br> Palmolive shampoo and conditioner, but didn't buy <br> it. |
| 15 | Pharmacy | Walk-away from <br> store | He was at the store to buy Cleanwipe lens cleaner. <br> He went to the shelf of Clearwipe and selected the <br> product without looking at the brand name. He then <br> browsed other products like Ego Aquim hand <br> sanitizer, Nivea sunscreen spray by looking at its |

picked the product Nexium 24 HR as soon as she located it on the shelf, as she recognized the product by its packaging. She was aware of the location of the shelves and the location of products on the shelves.
He was actually looking at the products that he would buy later. He was checking the price of specific products in the store.

She came to the store to check the price of specific products such as nail color and shampoo, hence didn't browse much inside the store. She didn't look at other sale products in the store. She took time to select this one product, which was an unplanned buying.
She was comparing the price of Palmolive shampoo with other store and found the shampoo here to be expensive. She came in to check price of this specific product.
He was familiar with the brand of lens cleaner and recognized it by the package. He was unable to state the name of the brand as he recognizes the brand through

|  |  |  | product description, back of the package and <br> walked away. He then went and kept the lens <br> cleaner back to the shelf and walked away. | its orange color package. While <br> browsing he changed his mind to <br> not to purchase it and kept the <br> product back. He didn't look at |
| :--- | :--- | :--- | :--- | :--- |
| price. |  |  |  |  |


|  |  |  | finally selected OMRON Blood Pressure machine after comparing the differences among machines based on readings, indicators and memory. | OMRON products were on special price, the product she selected was not on special, but got discount after persuading the staff. She was reluctant on accepting that she got a discount for the product. |
| :---: | :---: | :---: | :---: | :---: |
| 19 | Pharmacy | Walk-away from store | He was searching for an eye patch of a specific brand recommended by doctor. He searched for some time and then took assistance from staff. He looked at the brand name of Nexcare eye patch, recommended by staff, but didn't select it. He looked at the brand name, product description, back of package and price of products such as Gillette Fusion, Panadol back and neck pain relief and Piksters and walked away from these shelves | He couldn't find the particular brand of eye patch in the store and hence walked away from the store. He stated that he is more brand oriented than price. |
| 20 | Pharmacy | Purchases: Sinus saline bottle and prescription medicine for migraine Walk-away from shelves: Sukin Facial Masque, Blackmore Matcha Green tea, Agadir hair oil spray, hair clip, cold and flu tablet, skin theory | Being a vegan, she looked at shelves for products by looking at brand name, product description, ingredients, and labels. She took assistance from staff in locating the sinus product on the shelf. The sinus medicine that she was looking in particular was on sale, but was out-of-stock, so she selected the product recommended by the staff. Most of the time she didn't look at price, except for hair clip. | She followed a pattern of looking at the products by looking first at brand name, product description, ingredients. She is brand conscious and buys the brands that are vegan for purchases other than medicine. She was brand loyal. She checks online and compares brands before coming to the store. She trusts the pharmacist for choice of brand of medicine. |
| 21 | Pharmacy | Purchases: Codral cold and flu tablet, Phenergan Kids Unplanned Buying: | He always looked at brand name and price while selecting products. He bought Phenergan at the counter with the help of staff. Initially, he selected cold and flu tablet of easeacold brand, but on the | He stated that Codral was selected, as it was a familiar brand and cheaper than the other brand. Vitamin supplement and |


|  |  | Berocca vitamin supplement, Paw Paw lip balm Walk-away from shelves: Gillette razor, Mitchum deodorant, Bio-oil | way back when he saw codral was on reduced price and cheaper, he made up a decision to buy that. He selected Berocca vitamin supplement and Paw Paw lip balm. He walked away from shelves such as Gillette razor, Mitchum deodorant and Bio-oil. | lip balm were unplanned products, as he recollected while browsing that he needed those products. He is brand conscious. He bought all the products of familiar brand, which he has used before. He didn't have a look at the back of the package throughout his shopping. He is a cheetah, as he doesn't spend time in selecting products as he goes with familiar brands. |
| :---: | :---: | :---: | :---: | :---: |
| 22 | Pharmacy | Purchases: Schwarzkopf conditioner spray and cream, codral cold and flu tablet, Schwarzkopf color protect conditioner | She was in-store to buy Schwarzkopf brand of products. She was about to select Schwarzkopf Taft curl styling product, but then when she saw color protect conditioner on another shelf she selected it. She was comparing products of same brand. She got the cold and flu tablets from the counter along with prescription medicines. She looked at all the products by first looking at the brand name, then product description and reading the instructions and directions at the back of the package. She didn't look at price, there was no unplanned buying and didn't walk away from shelves | The hair products, which she bought, were on reduced price. She said that reduced price was not the factor in selecting those products. She was very specific about the products, which she wanted to purchase and didn't browse inside the store. She was brand conscious. Comfortable buying familiar brand that she has used before. |
| 23 | Pharmacy | Purchases: Generic brand cold and flu tablets Unplanned buying: chocolate packet, MooCoo's skin cream Walk-away from shelves: easeacold and codral | She was browsing the cold and flu shelf, comparing the picture on her mobile to the available brands on the shelf by looking at brand name. She looked at price and picked up the Generic brand, which was on reduced price and continued to compare it with other Generic brands on shelf by constantly looking at product description, ingredients and price. Finally, she selected another Generic brand cold and product, which had more tablets and was | Was in the store to buy specific brand of cold and flu tablets suggested by her colleague. She took time to choose the product, as she was particular about the ingredient in the product. She makes the decision to purchase a product after complete information processing and |


|  |  |  | cheaper. On the way to another shelf she saw other <br> brands (codral and easeacold ) tablets and looked at <br> their brand name and price for reconfirmation. <br> Selected MooCoo's skin cream after looking at <br> brand name and description and continued to look <br> at other brands by looking at brand names. Selected <br> chocolate packet from the chocolate shelf after <br> looking at product description and price. No <br> unplanned buying and no walking |
| :--- | :--- | :--- | :--- |
| 24 | Pharmacy | Purchases: <br> Blackmore Cold <br> and Flu Relief <br> Walk-away from <br> shelves: Sukin, <br> NATIO foundation <br> and deodorant <br> shelves | She walked away from lot of shelves after looking <br> at brand name and price. She went back and forth in <br> the aisle of vitamins and supplements comparing <br> products on sale. She looked at brands Blackmore, <br> Swiss and Nature's own. She was looking at brand <br> name and price at these shelves. Initially, she <br> selected a Blackmore product by looking at brand <br> name and price and then comparing it with other <br> Blackmore products in the shelf by looking at brand <br> name and price, but then she changed her mind and <br> moved to other shelves. Finally, she selected |
| Blackmore cold and flu tablet with PH forte and it |  |  |  |
| was the cheapest one. |  |  |  |

doesn't mind to reconfirm by looking at other brands on the shelf and analyzing before making cheapest and valuable choice. She walked away from shelves as she had already found the cheapest product.

She looked at the back of the package once but she didn't read anything as she was probably thinking. She was very price conscious and took ample of time to select a product, which was the cheapest, after comparing prices of all the available brands. She was more focused on price than brand. She walked away from shelves while comparing prices. Not a brand loyal.
She browsed around the store to check which products were on sale. She was taking time to think before making a decision to select Loving Tan product as initially she walked away from that shelf after analyzing all the tan products, came back, and selected the product in the end. She bought this product for the first time and so checked the
\(\left.$$
\begin{array}{|l|l|l|l|l|}\hline & & & \begin{array}{l}\text { shelves after looking at brand name, description, } \\
\text { color(Revlon) /instruction(Shampoo) and price }\end{array} & \begin{array}{l}\text { ingredient and description to } \\
\text { ease her decision. }\end{array} \\
\hline \text { Pharmacy } & \begin{array}{l}\text { Purchases: Revlon } \\
\text { Photo Ready } \\
\text { Airbrush effect } \\
\text { Foundation } \\
\text { Walk-away from } \\
\text { shelves: } \\
\text { Maybelline } \\
\text { eyebrow pencil }\end{array} & \begin{array}{l}\text { She directly went to the shelf of Revlon foundation } \\
\text { and was constantly looking at the brand name of the } \\
\text { product. She chooses the product by comparing the } \\
\text { foundation with her skin color. She walked away } \\
\text { from the Maybelline shelf after looking at the } \\
\text { product brand name and description. She didn't } \\
\text { look at price of the products. }\end{array} & \begin{array}{l}\text { She stated that she wasn't } \\
\text { looking at brand name, which is } \\
\text { in contrast to her behavior. She } \\
\text { stated to have come to the store } \\
\text { for browsing and bought the } \\
\text { unplanned product foundation of } \\
\text { a familiar brand Revlon. She is } \\
\text { brand conscious and buys } \\
\text { familiar brands only. She didn't } \\
\text { look at price throughout the } \\
\text { shopping and the product she } \\
\text { bought was not on special. She }\end{array}
$$ <br>

had made the decision to buy\end{array}\right\}\)| Revlon foundation before she |
| :--- |
| entered the store. |

\(\left.$$
\begin{array}{|l|l|l|l|l|}\hline & & \begin{array}{l}\text { shelves: Pantene } \\
\text { shampoo, cosmetic } \\
\text { shelf }\end{array} & \begin{array}{l}\text { the same brand. She moved back and forth between } \\
\text { looking products of different brands and finally } \\
\text { selected BioCeuticals product. She walked away } \\
\text { from cosmetic and pantene shampoo shelves. She } \\
\text { looked at brand name, product description, price, } \\
\text { ingredients and directions before walking away } \\
\text { from shelves. }\end{array}
$$ <br>

\hline P9 before finalizing the product.\end{array}\right]\)| Pharmacy |
| :--- |


|  |  |  | Browsed at Blackmore products shelf and ice gel <br> shelf by looking at brand name, product description, <br> directions and price. | products. Though he was <br> looking at the back of the <br> package, he was not reading, but <br> was staring. |
| :--- | :--- | :--- | :--- | :--- |
| 32 | Pharmacy | Purchases: Rimmel <br> volume colorist <br> mascara, nail <br> polish <br> Unplanned buying: <br> Telfast tablet <br> Walk-away from <br> shelves: Radiance <br> collection cream, <br> eyeliner | She walked away from the radiance collection shelf <br> after looking at a radiance collection cream. She <br> looked at the brand name, product description, read <br> back of the package and walked away. She selected <br> Rimmel volume colorist mascara after looking at <br> the product brand name, product description and <br> back of the package. She was searching for <br> appropriate eyeliner, but couldn't find it herself and <br> took assistance from the staff. In the meantime, <br> while the staff was finding the product for her, she | She in brand conscious and she <br> didn't look at price while in <br> cosmetic section. While <br> selecting medicines she did look <br> at price and compared it with <br> other brands. Medicine was an <br> unplanned product, as she <br> recollected while passing <br> through the shelf that she needed |
| a medicine. |  |  |  |  |


|  |  |  | case with nail polish with the staff. She went to the <br> shelf to check the price and enquires the staff about <br> how much worth of shopping the bag is given as a <br> free gift. | free. She said that whenever she <br> intends to buy any product, she |
| :--- | :--- | :--- | :--- | :--- |
| first checks out the price of the |  |  |  |  |
| product at all the stores and then |  |  |  |  |
| compares and decides from |  |  |  |  |
| which store to buy the product. |  |  |  |  |$|$


|  |  | Hair color, <br> Unplanned buying: <br> Batiste Dry <br> Shampoo, <br> Maybelline eyebrow pencil, Tresemme sea Salt spray <br> Walk-away from shelves: Nude <br> Foundation, Maybelline lipcolor | looking at price and brand name. She looked at price first, then brand name and product description, while selecting products. For hair color, she looked at colors and brand names of all the products and then selected the required specific color. While selecting Maybelline eyebrow pencil, Batiste dry shampoo and Tresemme sea salt spray, she looked at reduced price tags, brand name, and product description and selected the products. | products as they were on sale. She is price conscious and made the decision to select the brand of products based on price. She was aware of the shelf layout. She was constantly browsing the shelves by price. |
| :---: | :---: | :---: | :---: | :---: |
| 38 | Pharmacy | Purchases : <br> Rimmel Nail Polish Walkaway from shelves: Toni\&Guy Hair conditioner, Dry shampoo, Deodorant | Selected nail polish by looking at brand name, compared it with other colors, and finalized. She looked at the hair spray and dry shampoo and walked away. She was looking at quantity, instructions and directions, ingredients. She looked at the sale tag of Nivea deodorant, picked up the product, compared with Dove deodorant, and walked away from both the shelves. While at the deodorant shelves, she was looking at brand name, price, product description, ingredients and smelled the products. | She looked at the side of the package while at the deodorant shelf and read the ingredients and about the product. Toni\&guy products and deodorant were on reduced price but she still didn't buy them as she was in the store for a specific product. |
| 39 | Pharmacy | Purchases: Garnier Makeup Remover, Cotton <br> Unplanned buying: Neutrogena Facial Wipes, Rexona Deodorant Walk-away from shelf: Klorane Hair care. | She went to the shelf of makeup remover, picked Garnier Makeup Remover, and then looked at brand name, product description and instructions. While she moved towards the facial wipes shelf, from a distance she looked at the Neutrogena brand name and recognized the product by its package. She directly picked up the Neutrogena wipes and then looked at product description. She selected cotton from the shelf and gazed at the plane front part of the package. At the deodorant shelf, she looks at the | She is well aware of the shelf layout. She recognized the Neutrogena and Garnier product by the package and picked up the product instantly. She is a very fast in selecting products. Neutrogena wipes and Rexona Deodorant both were on reduced price. She bought the unplanned products as it was on special. |


|  |  |  | brand name of all the Rexona Deodrants, reduced price, smells one of them and selects one product. She walked away from Klorane hair care products by looking at brand name and price. | She buys the brand of products, which she has used before. |
| :---: | :---: | :---: | :---: | :---: |
| 40 | Pharmacy | Purchases: <br> DermaVeen, Bump eRaiser Walk-away from shelf: Simple wipes | She was browsing various products on shelves by first looking at the prices and then brand names. She saw reduced price tag of DermaVeen product, looked at brand name, product description and selected one of the products. Looked at price tag of simple wipes and then brand name and compared it with Nivea wipes, which was on special and walked away. She asked assistance for a cream and picked one product out of the two shown to her, which was small and looked at its product description, instruction and direction, before finally selecting it for purchase. | She was price conscious, looked for prices of products in the store, and bought one of the products, which were on special, but she was hesitant in accepting that. The other product was not on special but smaller size packet was selected to avoid spending more money. She checks price and online reviews about the products and buys instore. |
| 41 | Pharmacy | Purchase: Maybelline Brow drama(eyebrow mascara) | She searched for some time at the cosmetic section but couldn't find the eyebrow mascara and finally asked staff for assistance, who helped her to pick Maybelline Brow drama. She looked at the brand name and back of the package of the product. She was shown another brand L'Oréal, she looked at the brand name, back of the package, and in the end selected the Maybelline one. She was confused about her choice and so looked at other brands like essence, after selecting the product. | She came in to buy a specific product. She got the cheapest product as Maybelline was cheaper than L'Oréal. |
| 42 | Pharmacy | Purchase: Palmers hand cream Walk-away from shelf: Nivea Moisturiser | Browsed all the red tags of reduced price on shelves. She looked at the brand names of all hand creams at the shelf as she searched for a specific product. She took assistance from staff and was suggested a palmer's product, which initially she didn't select and continued browsing the entire shelf by brand name. She then compared two | She searched for a specific brand suggested by her friend. She didn't look at price while selecting hand cream, as she was more focused on the brand and product description. After selecting the product, she |


|  |  |  | products of Palmer's hand cream by looking at <br> product description and smelling them and selected <br> one. Finally, she chose the one suggested by the <br> staff. |
| :--- | :--- | :--- | :--- |
| 43 | Pharmacy | Purchases: Bondi <br> Sands, Rimmel nail <br> colors, Australis <br> eyeshadow <br> Walk-away from <br> shelves: Revlon <br> nail color, makeup <br> brush, nude color <br> by essence, savvy <br> foundation | She selected Bondi sands self-tanning after looking <br> at all other brand names of products on shelves. She <br> selected eye shadow products after looking at the <br> color and back of the product. While browsing she <br> looked at Rimmel nail colors offer tag and selected <br> 2 colors. She stopped at shelves after looking at <br> reduced price tags and picked products such as <br> Revlon nail color, makeup brush, nude color by <br> essence, savvy foundation to have a look and <br> walked away. |
| 44 | Pharmacy | Purchases: Essence <br> Mascara, Essence <br> Foundation <br> Walk-away from <br> shelves: Scholl Gel <br> Active Insoles | Browsing essence shelf, she selected Big lashes <br> mascara after looking at brand name and price. She <br> looked brand name of essence foundation powder, <br> back at number and selected the product. She <br> walked away from Scholl shelf after looking at <br> brand name, product description and back of the <br> package. |
| 45 | Pharmacy | Purchase: <br> Prescription <br> Medicine <br> Unplanned buying: <br> Fess Nasal Spray <br> Walk-away from <br> shelves: Celebrity <br> slim and Optifast <br> shake, FatBlaster <br> weight loss | She was at the medicine shelves. She looked at <br> brand name, product description, price, side and <br> back of Fess nasal spray and selected the one, <br> which was the cheapest. She looked at the brand <br> name and price of Celebrity slim and Optifast <br> shakes, FatBlaster weight loss booster, Blackmore <br> products and walked away from these shelves. She <br> also looked at the brand name and price of Zyretc, <br> Claratyne on medicine shelves and walked away |

browsed other shelves and again came to the hand cream shelf and looked at other brands, as she was not sure about her decision.
She was not in a hurry and took ample of time in selecting the products. She was there to buy whatever she could. She was price conscious. She waits for sale on the brand of products she usually buys, so that money can be saved on those products. She checks online reviews on products before buying.
She took time to select her mascara and after selecting, she continued to look at other brands. She was constantly looking at the back and front of the package and thinking. She checks whether the products were tested on animals.
She was comparing prices of products while looking at all the shelves from which she walked away. She was a doctor and hence she looked at ingredients while buying medicines She chooses any brand of medicine, which serves the basic purpose. She was price conscious.
$\left.\begin{array}{|l|l|l|l|l|l|}\hline & & & \begin{array}{l}\text { booster, Blackmore } \\ \text { products, Zyrtec } \\ \text { and Claratyne }\end{array} & & \\ \hline 46 & \text { Pharmacy } & \begin{array}{l}\text { Purchases: Sally } \\ \text { Hansen Miracle } \\ \text { Cure Strengthener, } \\ \text { Herbal essence } \\ \text { conditioner } \\ \text { Walk-away from } \\ \text { shelves: Simple } \\ \text { facial wipes, Sally } \\ \text { Hansen Triple } \\ \text { Strong Gel Fortifier }\end{array} & \begin{array}{l}\text { She looked at the brand name and product } \\ \text { description of simple moisturizing facial wash and } \\ \text { walked away from shelf. She looked at the brand } \\ \text { names of all Body wash products and walked from } \\ \text { the shelves. She looked at the brand name, read } \\ \text { product description at the back of the package of } \\ \text { Sally Hansen Miracle Cure Nail Strengthener and }\end{array} & \begin{array}{l}\text { She price conscious and } \\ \text { selected one product. She looked at the brand name } \\ \text { of Herbal Essences Conditioner and selected two of } \\ \text { products. She had earlier walked } \\ \text { away from the store after } \\ \text { checking out the price. She then } \\ \text { compared the price of products }\end{array} \\ \text { with other stores and couldn't } \\ \text { find a better offer on products }\end{array}\right\}$
$\left.\begin{array}{|l|l|l|l|l|}\hline & & & \begin{array}{l}\text { tag of the Nivea shelf, looked at the brand name of } \\ \text { various Nivea products, and selected one. }\end{array} & \text { was price conscious. } \\ \hline 49 & \text { Pharmacy } & \begin{array}{l}\text { Walk-away from } \\ \text { store }\end{array} & \begin{array}{l}\text { She looked at the brand name of Revlon Lipcolor, } \\ \text { its color, checked the color on hand and walked } \\ \text { away. She then checked out the lipcolor of another } \\ \text { brand Max factor. She compared colors of two } \\ \text { different lipcolor of Max Factor and walked out. } \\ \text { She even looked at L'Oréal lip color. }\end{array} & \begin{array}{l}\text { She didn't look at price as she } \\ \text { was after a color that she } \\ \text { desperately needed and so } \\ \text { wasn't concerned about price. }\end{array} \\ \hline 50 & \text { Pharmacy } & \begin{array}{l}\text { Purchase: } \\ \text { Palmolive Shower } \\ \text { Gel } \\ \text { Walk-away from } \\ \text { shelves: Palmer's } \\ \text { skin therapy, } \\ \text { Rouge Bourjois } \\ \text { lipstick }\end{array} & \begin{array}{l}\text { She walked away from shelves such as Palmer's } \\ \text { skin therapy after looking at brand name, product } \\ \text { description and back of the package to read from } \\ \text { where it was manufactured and Rouge bourjois } \\ \text { lipstick by looking at brand name, number and } \\ \text { color. After looking at brand name and price at the } \\ \text { body wash shelf, she selected the cheapest } \\ \text { Palmolive shower gel }\end{array} & \begin{array}{l}\text { She bought the product, which } \\ \text { wase on special, though there } \\ \text { special on the shelf. She looked } \\ \text { at the back of the package to } \\ \text { check the manufacturing, as she } \\ \text { prefers USA or France. }\end{array} \\ \hline 51 & \text { Pharmacy } & \begin{array}{l}\text { Walk-away from } \\ \text { shelves }\end{array} & \begin{array}{l}\text { Browsed cosmetic aisle. She walked away from } \\ \text { L'Oréal Lip color shelf after looking at colors and } \\ \text { discussing price with her friend. She looked at } \\ \text { brand name of Australis Eyeshadow Primer, picked } \\ \text { the product, had a look on it, kept it back, and } \\ \text { walked away. }\end{array} & \begin{array}{l}\text { She was checking out price and } \\ \text { getting information about the } \\ \text { products, which she didn't knew } \\ \text { about. She recognizes the } \\ \text { product with the package design } \\ \text { with familiar brands. The }\end{array} \\ \text { product that she was looking } \\ \text { today was an unfamiliar brand. }\end{array}\right\}$

|  |  | lip color, Nude by nature foundation and Natio Foundation |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 53 | Pharmacy | Purchases: Avene lotion, Brilliance Brunette Shampoo, Palmer's cocoa butter skin cream, Swisspers wipe pads, Energizer Batteries Walk-away from shelves: Revlon lip balm, Nivea Lip care, Burt's Bees, Simple wipes | She was looking at the reduced price tags and brand name of Nivea lotion, compared with the brand name, reduced price of Avene lotion, and selected the Avene product. Looked at the brand name, reduced price and product description of Brillance Brunette shampoo and selected it. Looked at the brand name and product description of Palmer's Cocoa Butter skin cream and selected it. She looked at the brand name and price of Swisspers wipe pads and selected it after comparing it with other Swisspers wipe products. She selected Energizer Batteries after locating it on shelf by brand name. She walked away from Revlon lip balm, Nivea Lip care, Burt's Bees and Simple wipes after looking at brand name and price. | She was slow while browsing shelves but was very quick in selecting the products. She was aware of shelf layout. Two of the products, which she selected, were on reduced price. She did look at price while selecting products and price was one of the factors for selecting the products. |
| 54 | Pharmacy | Walk-away from store | She walked away from lot of shelves after looking at brand name such as Sukin moisturiser, Covergirl lip color, NATIO, Savy Lip color. She looked at baby oil shelf and compared Johnson baby oil with Gaia oil. She looked at the brand name, price, and smelled Gaia oil. She even looked at the reduced price tag of one of Gaia products and compared two products by looking at product description and selected the one which was not on special, but was a small bottle with low price, but again kept it back and walked away. | She was constantly staring at the blank part of the bottle at the back and at the cap as if she was thinking. She walked away from the store to check the product in another store. She claimed that she was comparing bio-oil with Johnson, but actually, she was comparing Gaia oil with Johnson. She was trying to change the brand bio-oil as it was expensive. |
| 55 | Pharmacy | Purchases: Bondi Sands Tanning, | She went to L'Oréal shelf, looked at True Match foundation by brand name, color, and a glance at | She was very fast while selecting products. She didn't |

$\left.\begin{array}{|l|l|l|l|l|}\hline & & \begin{array}{l}\text { Travel Kit, Loreal } \\ \text { True Match } \\ \text { Foundation } \\ \text { Unplanned buying: } \\ \text { LE TAN }\end{array} & \begin{array}{l}\text { the back of package and selected the products. } \\ \text { Looking at skin tan shelf, looked at brand name and } \\ \text { then price, and selected the products. Selected one } \\ \text { Travel kit by looking at front part picture on the } \\ \text { package to see what bottles it includes. She took } \\ \text { assistance from staff in locating the travel pack. }\end{array} & \begin{array}{l}\text { look at price much. She bought } \\ \text { the products, which she has } \\ \text { bought before. She didn't look at } \\ \text { the back of the package. She was } \\ \text { price conscious. }\end{array} \\ \hline 56 & \text { Pharmacy } & \begin{array}{l}\text { Purchases: } \\ \text { Prescription } \\ \text { medicine } \\ \text { Walk-away from } \\ \text { shelves: Revlon lip } \\ \text { color, Revlon } \\ \text { foundation, } \\ \text { Covergirl Mascara, } \\ \text { Essence } \\ \text { Foundation }\end{array} & \begin{array}{l}\text { She looked at the brand name of all Nivea skin care } \\ \text { products and walked away from the shelf. She } \\ \text { looked at the sale price tag and brand name of } \\ \text { Revlon Lip color and foundation and walked away } \\ \text { from the shelves. She also looked at the brand name } \\ \text { of essence foundation and Covergirl mascara and } \\ \text { walked away from these shelves. }\end{array} & \begin{array}{l}\text { She bought products yesterday } \\ \text { and was trying to match those } \\ \text { products by looking for cosmetic } \\ \text { products on offers and exploring } \\ \text { shelves. She stated that she was } \\ \text { brand loyal of L'Oréal products, } \\ \text { although she looked at other }\end{array} \\ \text { brand of products while in store. }\end{array}\right\}$

|  |  |  | tag, and walked away. |  |
| :---: | :---: | :---: | :---: | :---: |
| 59 | Pharmacy | Walk-away from store | She walked away from perfume shelf after looking at reduced price tags and then at brand name of perfumes. She looked at Revlon half price tag and then looked at colors of Revlon lipcolor. She looked at price of other shelves such as Nude by Nature, ecotools brush | She was checking special price products. She was in a hurry while inside the store. She was looking at price first. She checked the original price again by pulling up the sale tag as she wanted to confirm whether it was on sale. |
| 60 | Pharmacy | Purchases: Down the pore, Revlon Foundation, Revlon Primer Walk-away from shelves: LIVE Hair color, Biore | She was looking at Revlon Foundation, selected the product by looking at brand name, and reduced price. She was looking Live hair color by brand name and colors, but walked away from the shelf. She initially selected the Biore product after looking at brand name and product description and then when she saw Down the pore after looking she changed her mind and selected it and kept the biore product back. | She was price conscious as she selected these Revlon products as they were on sale. She initially came to the store to check prices and then walked out and checked in other store and then again came back and purchased these products as she found it to be cheaper. However, when asked she gave other picture of not being price focused. |
| 61 | Pharmacy | Purchase: Rimmel Eye Brow Gel Walk-away from shelves: Rimmel eyebrow pencil, Australis Velourlips lip cream, L'Oréal Brow Bar | Looked at the brand name and price tag of Rimmel eye brow pencil and walked away from the shelf. She looked at the brand name of Australis Velourlips lip cream, L'Oréal Brow Bar and walked away from these shelves. She looked at brand name, reduced price tag of Rimmel Eye Brow Gel, and selected it. | She bought the product that was not on reduced price. She checks the product and compares price online. A video on Facebook influenced her decision to buy this product. |
| 62 | Pharmacy | Purchase: PolyTears eyed drops, Unplanned buying: | She compared the brand name, product description of brands of eyedrops such as Systane, Visine, Bion, Optrex and Poly- tears. While comparing she | She didn't look at price, as she knew the price of products, as she often bought these brands. |


|  |  | Batiste dry shampoo, Cutex nail polish remover Walk-away from shelf: Bourjois foundation | took a glance at the prices of these brands and selected Poly-tears which was the cheapest. She looked at the brand name of all the Batiste dry shampoo and selected one product. She looked at the brand name of Cutex nail polish remover and selected one product. She walked away from Bourjois foundation after looking at the brand name and color of the foundation. | Only one of the products, Batiste dry shampoo was on reduced price. She was brand conscious. |
| :---: | :---: | :---: | :---: | :---: |
| 63 | Pharmacy | Purchases: Nivea Moisture Mask, L'Oréal Foundation Walk-away from shelves: Oral B whitestrips, Palmolive shampoo, Elastic ponytailers, Elegant Touch Nails | She looked at the brand name of Nivea Moisture Mask and selected the product. She looked at the brand name of the L'Oréal shelf and reduced price tag and selects Foundation. She looked at the brand name and price of products such as Oral B whitestrips, Palmolive shampoo, Elastic ponytailers, Elegant Touch Nails and walked away from these shelves. | She had compared these products in other stores before coming to this store. She didn't look at the back of the package for any of the products she had looked. She claimed that she doesn't look at price, although one of the products that she bought was on reduced price. |
| 64 | Pharmacy | Walk-away from store | She looked at the reduce prices of Sukin products and walked away. Looked at the brand name and price of BIORE product, Over night success spot minimizing patches and walked away from the shelf. She looked at the brand name and color of Max factor foundation, brand name, color and $50 \%$ off tag on Rimmel foundation and brand name of Maybelline eyebrow pencil and walked away from these shelves. | She was looking for products of familiar brand. She waits for the price to be reduced. She had come to compare price of product. Though the product she was looking for were on offer still she didn't buy them. She was more interested on looking on to the colors. |
| 65 | Pharmacy | Purchases: <br> Bushman, <br> Naprogesic <br> Walk-away from | She looked at the brand name and price of perfumes and walked away. She looked at the brand name and product description of Sukin products, trilogy. She took assistance to locate the insect repellent | She did look at the back of the package but she didn't realize that she was doing it. She is a vegan and she checks for |


|  |  | shelves: Perfume, Sukin, Gas tablets | shelf, looked at the brand name of Bushman and selected it. Looked at the brand name of Naprogesic tablets and selects it. Looked at the brand name, product description, directions of Gasbusters, DeGas and charcotabs and walked away from the shelf. She took assistance from the staff on the gas tablets and she suggested Charcotabs, but she looked at the product and kept it back on shelf. | ingredients. She is brand conscious. |
| :---: | :---: | :---: | :---: | :---: |
| 66 | Pharmacy | Purchase: Rimmel Super lash Mascara Walk-away from shelves: Revlon Lipstick, lipcolor, Rimmel nail color, lipstick | She looked at the price, number, checked the color of Revlon Lipstick, Revlon lipcolor and walked away from the shelf. Looked at the $50 \%$ off price tag, brand name of Rimmel Extra Super lash mascara, back of the product and selected it. Looked at the $50 \%$ off price tag, nail colors and Lipstick and walked away. Looked at the brand name and back of Australis eyeshadow and walked away. Looked at the brand name and back of Savvy eyeshadow and selected it. | She knew the Rimmel products were on sale. She is price conscious person and waits for the price to be reduced and stocks up the products for future use when on sale. She didn't look at the brand name of products at the Revlon shelf as she was well aware of the shelf layout and knew the shelf was of Revlon. |
| 67 | Pharmacy | Walk-away from store | He looked at the brand names of all the Band-Aid products on the shelf and walked away. He looked at the brand name of Voltaren, Codral Cold and Flu tablets, Panadol, Panamax tablets and Scholl Gel Active and walked away from these shelves. He also looked at the reduced price and brand name of Strepsils and walked away. | He was looking for a specific brand of Band- Aid and couldn't find it in the store. He had a look at other shelves just to check and recollect whether he has the stock of these tablets at home. He was very quick in looking at products on shelves. |
| 68 | Pharmacy | Purchases: L'Oréal eyeliner, Rimmel brushes Walk-away from shelves: Revlon eyeshadow, lip | She went to the Revlon shelf, looked at price, color of Revlon eyeshadow and walked away. Looked at the price of Revlon lip color balm, checked the color and walked away. Looked at the brand name of L'Oréal eyeliner and selects the product. She checked the L'Oréal eyeshadow. Looked at the | She didn't look at the brand name of the products while at Revlon shelf, as she was well aware of the shelf layout and knew that the shelf was of Revlon. She was brand loyal and |


|  |  | color balm, <br> L'Oreal eyeshadow | Rimmel makeup brushes, price and selects two <br> brushes. | was hesitant in switching the <br> brand. She researches online <br> about unfamiliar brand of <br> product before buying. She was |
| :--- | :--- | :--- | :--- | :--- | :--- |
| brand conscious. |  |  |  |  |


|  |  | Bottle Nipples | name Johnson and Johnson Band-Aid, specifications, comparing with other Johnson and Johnson Band-Aid and selected one. She looked at the brand name of Advent Baby Bottle Nipples and walked away from the shelf. |  |
| :---: | :---: | :---: | :---: | :---: |
| 72 | Pharmacy | Purchases: Models <br> Prefer Contour <br> Eyeshadow, <br> Neutrogena Deep <br> Clean scrub, Savvy <br> Color correcting powder <br> Unplanned buying: <br> Maybelline <br> Eyeliner <br> Walk-away from shelves: L’Oréal <br> Lip color, L'Oréal <br> Khol Brow liner, <br> Maybelline color <br> Molten <br> Eyeshadow, Max <br> Factor Lipfinity <br> lipstick, Models <br> Prefer Foundation | She looked at the brand name and the colors of Models Prefer Foundation and walked away from the shelf. She looked at the brand name, packet of Maybelline eyeliner and selected it. She looked at the brand name and colors of Savvy color correcting powder and selected it. She initially looked at the Maybelline Eyeshadow Color Palettes and selected it, but when she saw Models Prefer Contour Eyeshadow, she looked at the colors and selected one, and kept the Maybelline Eyeshadow back on shelf. She looked at the brand name, product description of Neutrogena Deep Clean scrub, Neutrogena Acne Stress control, compared and first selected Acne as it was on reduced price, but changed her mind and then selected Neutrogena Scrub. She walked away from a lot of other shelves after looking at brand name and price, such as L'Oréal Lip color, L'Oréal Khol Brow liner, Maybelline color Molten Eyeshadow and Max Factor Lipfinity lipstick. | She decided to select the Neutrogena product, which she used before rather than going for the sale one, which she haven't used before. She compared products at other store and found products in this store cheaper. She usually buys familiar brands. While at the L'Oréal shelf, she lifted the offer tag to check the original price and to confirm that indeed there is an offer. |
| 73 | Pharmacy | Walk-away from store | She looked at the brand name, product description and price of Refresh eye drop and walked away from the shelf. She looked at the brand name of Scholl Gel Active and walked away from the shelf. She took assistance from staff to locate Travalo Perfume Atomiser and was told by them that the product is out-of-stock. | She looked at eye drop and didn't buy, as it was expensive. She was at the store to buy travalo perfume atomiser, as she couldn't find the product in other stores. |
| 74 | Pharmacy | Purchases: Eylure | She went to the Revlon shelf, looked at the price, | She looked at the price of the |


|  |  | False Eyelashes, Beauty Essentials Eyelash Curler Walk- Away from Shelves: <br> Maybelline Lip color, Revlon lip color balm, Montagne Jeunesse blemish Mud Masque, Deep Down Detox Mud mask | color of Revlon lip color balm and walked away. She looked at the price of Maybelline lip color, brand name of Montagne Jeunesse blemish Mud Masque, Deep Down Detox Mud mask, Absolute Dream clean Cleanser and walked away from these shelves. She looked at price, brand name of Eylure false eyelashes, compared it with 1000 Hour false eyelashes and after discussing the price with her friend, she selects Eylure false eyelashes. Looked at the brand name of Beauty Essentials Eyelash Curler and selected it. She also looked at the brand name of Studex studs, looked at all the studs on the shelf and walked away. | products first before looking at the brand name. She has a sensitive skin, so she mostly looks for ingredients in products, though she didn't look at the ingredients during the study. She compared the eyelashes in other store before coming to this store. She looks at ingredients and directions for medicines. |
| :---: | :---: | :---: | :---: | :---: |
| 75 | Pharmacy | Purchase: Rimmel Volume Colorist mascara Walk-away from shelves: Lady Jayne Hairbursh, Versace Perfume. | She looked at the $50 \%$ off price tag, brand name, and back of Rimmel Volume Colorist Mascara and selected. Looked at the brand name of Versace perfume, smelled it and walked away. Looked at the brand name of Lady Jayne hairbrush and its reduced price tag and walked away from the shelf. | She knew that Rimmel mascara was on sale. She was price conscious person and came in to buy the specific product. She looked at the back of mascara to check whether it is waterproof. |
| 76 | Pharmacy | Purchase: Nude by nature concealer Walk-away from shelves: Revlon under eye concealer, Natio lipstick, Savvy Under Eye Liquid Concealer | She looked at the brand name, price, and color of Revlon Colorstay under eye concealer and walked away. Looked at the color of Revlon lip color balm, brand name of Nude by Nature Concealer, brand name and back of the product, Natio lipstick and walked away from these shelves. She looked at the brand name of Savvy Under Eye liquid concealer and walked away. She then on suggestion from her friend again went to the Nude by nature shelf, looked at its colors of Nude by Nature Concealer, and selected one product. | She was looking for natural and cruelty free products. She buys products on sale and stock up products during sale. She waits for the price to be reduced. She looks for ingredients in medicines. She compares products online and buys instore. She was price conscious person. She checks unfamiliar brands online before buying it in-store. |
| 77 | Pharmacy | Purchases: | She looked at the $20 \%$ offer tag at Neutrogena deep | She bought the Neutrogena |


|  |  | JBronze Self tan, <br> Self- Tan <br> Applicator Mitt, <br> Neutrogena Deep <br> Cleanser <br> Walk-away from <br> shelf: Palmer <br> Moisturiser | clean cleanser, looked at the product description, <br> compared it with other products on shelf, and <br> selected it. She looked at the brand name of <br> JBronze Self tan product and selected it. She <br> picked a Self-tan applicator Mitt from the shelf, <br> looked at its back, read and selected it. She looked <br> at the brand name of all Palmer moisturising <br> products and walked away. | unfamiliar brand, and so she <br> looked at the product <br> description. JBronze was a <br> familiar brand. She stocks up <br> familiar brand of products <br> during sale. She didn't look at <br> price except for Neutrogena <br> product. |
| :--- | :--- | :--- | :--- | :--- |
| 78 | Pharmacy | Purchase: <br> Maybelline <br> Volume Express <br> Mascara | She looked at the brand names, price and compared <br> two Maybelline mascara products. She took <br> assistance in selecting the product and upon <br> recommendation selected one of the two mascaras, <br> which were under her consideration. | She checks online products first <br> and then buys it instore. She <br> bought this Maybelline product <br> based on recommendation <br> provided in a YouTube video. |
| 79 | Walk-away from <br> store | She looked at the brand name, then colors of of <br> Revlon lip color, and walked away from the shelf. <br> She browsed the shelf and looked at the brand name <br> and then colors of Maybelline lipstick, Maybelline <br> fit foundation, Maybelline Eyeliner and walked <br> away from the shelf. She looked at the brand name <br> and colors of Bourjois lipstick, Bourjois lip color, <br> Essence lipstick and walked away from these | She was looking for a color in <br> Revlon lip color, but the product <br> was out-of-stock. She checked <br> the color of lip color in other <br> brands but couldn't find it. She <br> had checked the product online <br> after watching a YouTube video <br> about the lip color. She doesn't |  |
| care of price. She was brand |  |  |  |  |
| shelves. |  |  |  |  |


|  |  |  | products and walked away from the shelf. |  |
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| 81 | Grocery | Walk-away from store | He walked away from most of the shelves. He was looking for oranges, apples, tomatoes, nuts and lettuce. He looked at the brand name of nuts, back of the package, and walked away. He touched tomato and lettuce. He first looked at the price of fruits and vegetables before looking at the vegetable or fruits itself. | He was at the store to check the price of vegetables and fruits so that he can compare it with other supermarkets. He compares and then makes a decision to buy. He was price conscious |
| 82 | Grocery | Purchases: <br> Avocado, apples, oranges, tomatoes, watermelon, onion, garlic, bread, curd, nuts, mushroom Walk-away from shelf: Pear | He pressed avocado before selecting it. Looked at price first and then selected apples, oranges, tomatoes, watermelon, onion, and garlic, looked at nuts by brand name and selected one packet. He also selected curd pack and flat bread after looking at brand name. He walked away from the pear shelf after looking at price. | He looked at price before selecting products but said that price was not the main concern for him. He knew what he wanted to buy before he entered the store. He bought the same brand of nuts, bread and curd, which he always buys. |
| 83 | Grocery | Unplanned buying: Avocado, Cabbage, Strawberries, Tomatoes, Mushrooms, Beans, Beetroot, Choy sum, Garlic packet, Shallots, Coriander bunch Walked away from shelves: Oranges and Coconut | He looks at price first and then selects the fruits and vegetables. He selected avocado, cabbage, strawberries, tomatoes, mushrooms, beans, beetroot, choy sum, garlic packet, shallots and coriander bunch. While selecting beetroot, choy sum, he looked at the root and the leaf respectively. While looking at beans, he knew it was fresh and selected it. He walked away from coconut and orange shelf after looking at the price and the product. | He was a price conscious person, but was hesitant in accepting that he looked at price and showed that he was not interested in price. He compares the vegetables and fruits with other shops. He doesn't have plan while buying vegetables, fruits, and buys whichever he feels are fresh in the store. |
| 84 | Grocery | Purchase: Lettuce Unplanned buying: Cauliflower | He looked at lettuce leaves and selected one. He happened to look at cauliflower shelf and after looking at all the cauliflowers, selected one. | He didn't look at price while shopping. He looked at vegetables and fruits carefully before selecting it. He doesn't compare fruits and vegetables |


|  |  |  |  | with other stores. He comes to the store with a list and buys accordingly. He goes for unplanned buying, if the vegetable and fruit are fresh. |
| :---: | :---: | :---: | :---: | :---: |
| 85 | Grocery | Purchase: <br> Eggplant, Leeks, Cucumber, <br> Bananas, Green Apples, Mushrooms, Tomatoes, Brown Onions Unplanned buying: Spinach Walk-away from shelves: Carrot, Red Capsicum, Zucchini, And Rocket Packet | She always looked at price first and then looked at fruits and vegetables and selected them. Looked at the price of eggplant, searched and selected the one, which is the smallest, looked at the price of leeks and selected one. Looked at the price of cucumber and then selected cucumbers by looking at the tip of cucumber. She selects bananas, which are more ripe and yellow in color. Selected mushrooms after looking smaller and intact ones and discussing the quantity needed. She selected green apples after looking at the apples, which doesn't have a mark on the skin, selected packet of tomatoes after looking at the label, selected brown onions and spinach after looking at the leaves and its skin. She walked away from carrot, red capsicum, zucchini, and rocket packet shelves after looking at price. | She is price conscious and followed a pattern of looking at price first and then looking at fruits or vegetables. She made the decision to buy or not based on price. She had a list with her and bought the vegetables and fruits based on that list. |
| 86 | Grocery | Unplanned buying: Cauliflower, Cabbage, Herbs Walk-away from shelves: Garlic, Capsicum, Brown Onions | He looked at price of cauliflower, cabbage, herbs and selected them. He walked away from garlic, brown onion and capsicum shelves after looking at price. | He looked at price first and then looked at fruits and vegetables. He knew the price of the fruits and vegetables in other stores and hence was comparing and walked away from shelves, as he was sure he would get the same product at cheaper price in other store. |
| 87 | Grocery | Purchases: Brown Onions, cucumber, carrots, capsicum, | He looked at cucumber and carrots and selected them. He looked at capsicum, cabbage, spinach before selecting it. He selected capsicum after it | He knew the price of veggies and fruits of other stores. He said that he would buy tomatoes |


|  |  | cabbage, spinach Walk-away from shelf: Tomato | checking out by pressing it and selected spinach by carefully looking at its leaves. He walked away from the tomato shelf after looking at its price. | from other store. |
| :---: | :---: | :---: | :---: | :---: |
| 88 | Grocery | Purchases: <br> Broccoli, Coriander, Leeks, Baby Bok Choy, Ginger, Brown Onions Unplanned buying: Avocado Walk-away from shelf: Bananas | She looked at broccolis from all sides and then selected it. She looked at price and selected coriander, leeks, baby bok choy, ginger. She looks at the ginger, searches, and selects the ones, which are more polished. She looks and searches baby bok choy, and selects the one, which is fresher. She selects packet of brown onions. She happened to look at avocados and selected it. She walked away from the banana shelf as it was not ripe. | She was at the store for specific items. She was very quick and choosy in selecting fruits and vegetables. For some of the vegetables she looked at price and then selected it, though later she said that price wouldn't stop her from buying anything. She was well aware of the shelf layout. She bought Avocado as it was available and was not a planned buying. |
| 89 | Grocery | Unplanned buying: Oranges, Apples, Bananas, pear, grapes, pineapple, carrots, bread, capsicum, lettuce, mandarin,broccoli, watermelon,potatoe s, pumpkin | She looked at apples, oranges, bananas, pears, grapes and selected it. She smelled pineapple, and selected one, selected broccoli by touching it. She selected watermelon, carrots, bread and potato packets as soon as she saw them on shelves. She also selected red capsicum, lettuce, mandrain and pumpkin. She didn't walkaway from any shelves. | She didn't look at price. She was well aware of shelf layout. She said all the fruits and vegetables bought were unplanned, as she makes the decision to buy as soon as she sees the vegetables on the shelves. |
| 90 | Grocery | Unplanned buying: Cucumber, Pears, kiwi, oranges, green apple, custard apple, mandarins | He looked at the skin of cucumber and selected some. He looked at pears, kiwi fruit, oranges, green apples, custard apple before selecting it. He also selected a bag of mandarin. He selected fruits and vegetables by looking at the skin and by pressing it by hand. He didn't walkway from shelves | He did look at price first and then selected the fruits and vegetables, but was reluctant to accept it. He was quick in searching and selecting the best one from the fruit or vegetable shelf. |

$\left.\begin{array}{|l|l|l|l|l|}\hline 91 & \text { Grocery } & \begin{array}{l}\text { Purchases: Pear, } \\ \text { Kiwifruit, Bananas, } \\ \text { Grapes, Pineapples, } \\ \text { Apples, Potatoes, } \\ \text { Coriander } \\ \text { Walk-away from } \\ \text { shelves: Onion and } \\ \text { Avocado, } \\ \text { Rockmelons, } \\ \text { packet of Nuts }\end{array} & \begin{array}{l}\text { He looked at the price of pear and kiwi fruit and } \\ \text { selected it by looking at the skin. He looked at the } \\ \text { price and then selected bananas, grapes, pineapples, } \\ \text { apples, potatoes and coriander. He walked away } \\ \text { from shelves of avocado, onion, rockmelons and } \\ \text { nuts after looking at their price. He was looking at } \\ \text { the brand name of the nuts before keeping it back } \\ \text { on shelf. }\end{array} & \begin{array}{l}\text { He looks at the price first and } \\ \text { then selects the fruits and } \\ \text { vegetables. He was constantly } \\ \text { looking at the price tag of } \\ \text { potatoes after selecting a bag of } \\ \text { potatoes, as he was unsure with } \\ \text { the decision made to buy } \\ \text { potatoes. He also looked at the } \\ \text { price of onions and was thinking } \\ \text { as well as he was unsure of } \\ \text { walking away from the shelf. }\end{array} \\ \hline 92 & \text { Grocery } & \begin{array}{l}\text { Purchases: } \\ \text { Strawberries, } \\ \text { Oranges, Orange } \\ \text { juice }\end{array} & \begin{array}{l}\text { She looked at strawberries, oranges and selected it. } \\ \text { She looked at the shelf of orange juice and selected } \\ \text { the jar after looking at brand name and expiry. }\end{array} & \begin{array}{l}\text { She selected the orange juice, } \\ \text { that she had used before. She } \\ \text { buys products based on } \\ \text { convenience and doesn't } \\ \text { compare, looks at package for } \\ \text { contents. She didn't look at } \\ \text { price. }\end{array} \\ \hline 93 & \text { Grocery } & \begin{array}{l}\text { Purchases: } \\ \text { Bananas, } \\ \text { Strawberries, } \\ \text { Oranges, Kiwi and } \\ \text { Watermelon }\end{array} & \begin{array}{l}\text { He looked at price first and then selected the fruits. } \\ \text { He selected fruits such as bananas, strawberries, } \\ \text { oranges, kiwi and watermelon. He didn't walk away } \\ \text { from shelves. }\end{array} & \begin{array}{l}\text { Hes a decision to buy } \\ \text { fruits based on the price. He was } \\ \text { very price conscious person and } \\ \text { buys only cheaper fruits and }\end{array} \\ \text { vegetables. He compared price } \\ \text { of fruits and vegetables with } \\ \text { other stores. }\end{array}\right]$

|  |  |  | information at the front of the package and walked away, He looked at brand name and biscuits of Nonna's biscuits packet. He looked at the picture, brand name, back of the package of Cannoli Bambini, and walked away from the shelf. He was browsing all the vegetables shelves and happened to look at coriander packet and looked at its price and selected | biscuits and their price. He was calorie conscious and price conscious. He was there at the store to check the prices of vegetables as he compares the price with other stores. |
| :---: | :---: | :---: | :---: | :---: |
| 96 | Grocery | Purchases: Mandarin, Pear, Bananas, Green apples, Carrots, Brussels sprouts, zucchini, asparagus potatoes, onions, cauliflower, cabbage Walk-away from shelf: Walnut | She looked at the fruits such as pear, mandarin, bananas, and green apples and selected it. She looked at carrots, brussels sprouts, zucchini, asparagus, cauliflower, bag of washed potatoes, bag of onions and cabbage. She looked at price after looking at mandarin, green apples, cauliflower and asparagus. She walked away from walnut after looking at the nuts. | She was quick in selecting the vegetables and fruits. She was not price conscious, though she looked at the price of some of the vegetables. She bought the vegetables and fruits, which she always buys from the store. |
| 97 | Grocery | Purchases: <br> Strawberries, Pears Bananas | She selected strawberries by looking at the brand name and smelling it. She initially selected pear by looking at its skin, but then again when she saw a shelf of pear and found it to be cheaper, she started to replace the earlier ones with the pear in this shelf, by pressing and looking at its skin. She was searching and looking at the skin of bananas and selected one bunch of bananas. | She was searching for grapes that she couldn't find in the store. She took time to select bananas as she wanted ripe ones and was thinking while selecting it. |


| 98 | Grocery | Purchases: <br> Mushrooms, Red <br> Capsicum, <br> Macadamia, <br> Cucumber, <br> Tomatoes, <br> Avocados, Green <br> Apples, Apples, <br> Brown Onions, <br> Sweet potatoes, <br> Shallots | He selected fruits and vegetables by looking at the <br> skin and selected the ones, which had no marks or or <br> were hard. He was selecting avocados which were <br> hard, tomatoes, mushrooms, cucumber, capsicum <br> which have no marks and apples which had no <br> marks as well as he pressed to check the quality. He <br> picked a packet of brown onions. He looked at the <br> brand name of the macadamia packet and selected <br> it. He also selected shallots and sweet potato by <br> looking at the leaves and the skin of the potato. | He weosy while <br> selecting the fruits and <br> vegetables. He didn't look at the <br> price. He compared fruits and |
| :--- | :--- | :--- | :--- | :--- |
| 99 | Grocery | Purchases: Sweet <br> potato, potato, <br> salads, cucumber, <br> capsicum, lettuce | She looked at the vegetables and then looked at the <br> price. She walked away from corn, strawberries <br> shelves after looking at price. She looked at sweet <br> potato, cucumber, bag of potato, capsicum, lettuce <br> leaves and selected it after looking at price. She | Price was the main concern <br> while making the decision to <br> buy or not. She was searching <br> for vegetables inside store as she <br> was not well aware of shelf |
| selected the salad package after looking at the brand |  |  |  |  |
| name. |  |  |  |  |

## Appendix C: Table 4: Factor Analysis- Rotated Component Matrix



Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 6 iterations.

Appendix D- Logistic Regression and Cross-tabulation

## Cheetah

## Model Convergence Status <br> Convergence criterion <br> (GCONV=1E-8) satisfied.

| Model Fit Statistics |  |  |
| :--- | ---: | ---: |
| Criterion | Intercept <br> Only | Intercept <br> and <br> Covariates |
| AIC | 134.813 | 105.593 |
| SC | 137.418 | 110.803 |
| $\mathbf{- 2 ~ L o g ~ L}$ | 132.813 | 101.593 |


| Testing Global Null Hypothesis: | BETA=0 |  |  |
| :--- | ---: | ---: | ---: |
| Test | Chi-Square | DF | Pr $>$ ChiSq |
| Likelihood Ratio | 31.2199 | 1 | $<.0001$ |
| Score | 27.4252 | 1 | $<.0001$ |
| Wald | 21.3309 | 1 | $<.0001$ |


| Analysis of Maximum Likelihood Estimates |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Parameter | DF | Estimate | Standard Error | Wald <br> Chi-Square | Pr $>$ ChiSq |
| Intercept | 1 | 0.7083 | 0.2577 | 7.5534 | 0.0060 |
| Reported_Cheetah | 1 | -1.4208 | 0.3076 | 21.3309 | <. 0001 |


| Odds Ratio Estimates |  |  |  |
| :--- | :---: | :---: | ---: |
| Effect | Point Estimate | 95\% Wald <br> Confidence Limits |  |
| Reported__Cheetah | 0.242 | 0.132 | 0.441 |


| Association of Predicted Probabilities and <br> Observed Responses |  |  |  |
| :--- | ---: | :--- | ---: |
| Percent Concordant | 81.2 | Somers' D | 0.625 |
| Percent Discordant | 18.6 | Gamma | 0.627 |
| Percent Tied | 0.2 | Tau-a | 0.298 |
| Pairs | 2356 | c | 0.813 |

Vulture

## Model Convergence Status

Convergence criterion (GCONV=1E-8) satisfied.

| Model Fit Statistics |  |  |  |
| :--- | ---: | ---: | :---: |
| Criterion | Intercept <br> Only | Intercept <br> and <br> Covariates |  |
|  |  |  |  |
| AIC | 134.813 | 104.938 |  |
| SC | 137.418 | 110.149 |  |
| $\mathbf{- 2 ~ L o g ~ L ~}$ | 132.813 | 100.938 |  |

Testing Global Null Hypothesis: BETA=0

| Test | Chi-Square | DF | Pr $>$ ChiSq |
| :--- | ---: | ---: | ---: |
| Likelihood Ratio | 31.8745 | 1 | $<.0001$ |
| Score | 26.7033 | 1 | $<.0001$ |
| Wald | 19.8299 | 1 | $<.0001$ |


| Analysis of Maximum Likelihood Estimates |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Parameter | DF | Estimate | Standard <br> Error | Wald | Pr $>$ Chi-Square | ChiSq

Odds Ratio Estimates

| Effect | Point Estimate | 95\% <br> Confidence Limits |  |
| :--- | ---: | ---: | ---: |
| ReportedVulture | 0.206 | 0.102 | 0.412 |


| Association of Predicted Probabilities and <br> Observed Responses |  |  |  |
| :--- | ---: | :--- | ---: |
| Percent Concordant | 80.9 | Somers' D | 0.618 |
| Percent Discordant | 19.0 | Gamma | 0.619 |
| Percent Tied | 0.1 | Tau-a | 0.294 |
| Pairs | 2356 | c | 0.809 |

First/frequent (buyers)

| Model Convergence Status <br> Convergence criterion (GCONV=1E-8) satisfied. |  |  |
| :---: | :---: | :---: |
| Mod | del Fit Stat | istics |
| Criterion | Intercept Only | Intercept and Covariates |
| AIC | 120.591 | 111.876 |
| SC | 123.196 | 117.087 |
| $-2 \log L$ | 118.591 | 107.876 |


| Testing Global Null Hypothesis: |  |  |  |
| :--- | ---: | ---: | ---: |
| TETA=0 |  |  |  |
| Test | Chi-Square | DF | Pr $>$ ChiSq |
| Likelihood Ratio | 10.7144 | 1 | 0.0011 |
| Score | 10.9583 | 1 | 0.0009 |
| Wald | 9.2303 | 1 | 0.0024 |

[^0]

## Crosstabs


cheetahpred * Actual_cheetah Crosstabulation
Count

|  |  | Actual_cheetah |  |  |
| :--- | :--- | ---: | ---: | ---: |
|  |  |  |  |  |
|  |  | .0 | 1.0 | Total |
| cheetahpred | 0 | 52 | 15 | 67 |
|  | 1 | 10 | 23 | 33 |
| Total |  | 62 | 38 | 100 |

Case Processing Summary

|  | Cases |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Valid |  | Missing |  | Total |  |
|  | N | Percent | N | Percent | N | Percent |
| vulturepred * Actual_vulture | 100 | 100.0\% | 0 | 0.0\% | 100 | 100.0\% |

vulturepred * Actual_vulture Crosstabulation
Count

|  |  | Actual vulture |  |  |
| :--- | :--- | ---: | ---: | ---: |
|  |  |  |  |  |
|  |  | .0 |  | 1.0 |
| Total |  |  |  |  |
| vulturepred | 0 | 20 | 9 | 29 |
|  | 1 | 18 | 53 | 71 |
| Total |  | 38 | 62 | 100 |


| Case Processing Summary |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Cases |  |  |  |  |  |
|  | Valid |  | Missing |  | Total |  |
|  | N | Percent | N | Percent | N | Percent |
| firstfreqpred * <br> First frequent | 100 | 100.0\% | 0 | 0.0\% | 100 | 100.0\% |


|  |  | First frequent |  | Total |
| :---: | :---: | :---: | :---: | :---: |
|  |  | . 0 | 1.0 |  |
| firstfreqpred | 0 | 4 | 6 | 10 |
|  | 1 | 24 | 66 | 90 |
| Total |  | 28 | 72 | 100 |

## Appendix E: Questionnaire and Interview Questions

## Questionnaire

| Please " $\mathbf{X}$ " checkbox to indicate your answer |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. | Questions | Strongly disagree <br> (1) | Disagree <br> (2) | Some what disagr ee (3) | Neither agree nor disagree <br> (4) | Some what agree (5) | Agree <br> (6) | Strongly Agree <br> (7) |
| 1 | I like buying products from this store | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ |
| 2 | The store always has the products which I intend to buy | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ |
| 3 | Shelf layout of the store is good | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ |
| 4 | The store has good quality products | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ |
| 5 | Less time is consumed in searching products | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ |
| 6 | The price of the products are cheaper than other stores | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ |
| 7 | I enjoy shopping in this store | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ |
| 8 | I often purchase the same thing from this store | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ |
| 9 | Shopping is easy and convenient in this store | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ |
| 10 | I often decide to purchase products as soon as I identify them on the shelf | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ |
| 11 | This store attracts a lot of customers | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ |
| 12 | I look at all the other available choice of products and then purchase the best one | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ |
| 13 | Service provided by the store is good | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ |
| 14 | My purchase decisions are made in a hurry to save time spend on the selection process | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ |


| 15 | This is my primary pharmacy store |  |  | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. | Questions |  |  | Strongly disagree | Disagree <br> (2) | Some what disagr ee (3) | Neither agree nor disagree <br> (4) | Some what agree (5) | Agree <br> (6) | Strongly Agree <br> (7) |
| 16 | The store provides better offers on products than other stores |  |  | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ |
| 17 <br> a) | I look at the following before purchasing <br> Price |  |  | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ |
| b) | Brand |  |  | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ |
| c) | Product Description(What the product does) |  |  | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ |
| d) | Content Description(Ingredients) |  |  | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ |
| e) | Instructions and Directions |  |  | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ |
| 18 | The products bought from this store are value for money |  |  | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ |
| 19 | The store has a good atmosphere |  |  | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ |
| 20 | After checking out the products on the store shelf, I often walk away without buying something |  |  | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ |
| Gender |  | $\square$ Male $\square$ Female |  |  |  |  |  |  |  |  |
| Age |  | $\square$ 18-24 $\quad \square$ 25-34 $\quad \square$ 35-44 $\quad \square$ 45-54 $\quad \square$ 55-64 $\square 65+$ |  |  |  |  |  |  |  |  |
| Highest level of Education |  | $\square$ High school $\square$ Some year of University $\square$ Trade/Technical/Vocational training$\square$ Graduate degree $\square$ some Postgraduate Study $\square$ Post graduate degree |  |  |  |  |  |  |  |  |
| Occupation |  | $\square$ Business $\square$ Housewife $\square$ Service $\square$ Student $\square$ Unemployed |  |  |  |  |  |  |  |  |

## Thank You for Your Participation in this Research

## Interview Questions

1. What did you come here today to buy?
2. What were you looking for?
3. What motivates you to buy products from this store?
4. Does it happen that you look at products but don't buy them? If yes, then Why?
5. Do you buy unplanned products?
6. Have you ever walked away from the store? If yes, Why?
7. Do you compare products from other stores and then make a decision to buy?

## Appendix F: Ethics Approval

Re: 'Understanding consumer decision making complexity and walk-aways in retail pharmacy and grocery shopping.

Reference No.: 5201600139

Thank you for your recent correspondence. Your response has addressed the issues raised by the Faculty of Business \& Economics Human Research Ethics Sub Committee. Approval of the above application is granted, effective "21/04/2016". This email constitutes ethical approval only.

This research meets the requirements of the National Statement on Ethical Conduct in Human Research (2007). The National Statement is available at the following web site:

## http://www.nhmrc.gov.au/ files nhmrc/publications/attachments/e72.pdf.

The following personnel are authorised to conduct this research:

Miss Smitha Chandrasekharan Nair
Professor Scott Koslow

NB. STUDENTS: IT IS YOUR RESPONSIBILITY TO KEEP A COPY OF THIS APPROVAL EMAIL TO SUBMIT WITH YOUR THESIS.

Please note the following standard requirements of approval:

1. The approval of this project is conditional upon your continuing compliance with the National Statement on Ethical Conduct in Human Research (2007).
2. Approval will be for a period of five (5) years subject to the provision of annual reports.

Progress Report 1 Due: 21st Apr 2017
Progress Report 2 Due: 21st Apr 2018
Progress Report 3 Due: 21st Apr 2019
Progress Report 4 Due: 21st Apr 2020
Final Report Due: 21st Apr 2021

NB. If you complete the work earlier than you had planned you must submit a Final Report as soon as the work is completed. If the project has been discontinued or not commenced for any reason, you are also required to submit a Final Report for the project.

Progress reports and Final Reports are available at the following website:
http://www.research.mq.edu.au/for/researchers/how to obtain ethics approval/ human research ethics/forms
3. If the project has run for more than five (5) years you cannot renew approval for the project. You will need to complete and submit a Final Report and submit a new application for the project. (The five year limit on renewal of approvals allows the Committee to fully re-review research in an environment where legislation, guidelines and requirements are continually changing, for example, new child protection and privacy laws).
4. All amendments to the project must be reviewed and approved by the Committee before implementation. Please complete and submit a Request for Amendment Form available at the following website:
http://www.research.mq.edu.au/for/researchers/how to obtain ethics approval/ human research ethics/forms
5. Please notify the Committee immediately in the event of any adverse effects on participants or of any unforeseen events that affect the continued ethical acceptability of the project.
6. At all times you are responsible for the ethical conduct of your research in accordance with the guidelines established by the University. This information is available at the following websites:
http://www.mq.edu.au/policy/
http://www.research.mq.edu.au/for/researchers/how to obtain ethics approval/
human research ethics/policy

If you will be applying for or have applied for internal or external funding for the above project it is your responsibility to provide the Macquarie University's Research Grants Management Assistant with a copy of this email as soon as possible. Internal and External funding agencies will not be informed that you have approval for your project and funds will not be released until the Research Grants Management Assistant has received a copy of this email.

If you need to provide a hard copy letter of approval to an external organisation as evidence that you have approval, please do not hesitate to contact the FBE Ethics Committee Secretariat, via fbe-ethics@mq.edu.au or 9850 4826. Please retain a copy of this email as this is your official notification of ethics approval.

Yours sincerely,<br>Dr. Nikola Balnave<br>Chair, Faculty of Business and Economics Ethics Sub-Committee<br>Faculty of Business and Economics<br>Level 5, E4A Building<br>Macquarie University<br>NSW 2109 Australia<br>T: +61 298504826<br>F: +61298506140<br>www.businessandeconomics.mq.edu.au/

# Appendix G: Participant Information and Consent Form 

## Participant Information and Consent Form

Name of Project: Understanding consumer behaviour in retail pharmacy and grocery shopping.
You are invited to participate in a study of understanding consumer responses to retail shelves. The purpose of this study is to understand consumer decision making in purchasing products in retail shops and understanding their shopping behaviour. The study also focusses on understanding the reasons why consumers choose not to buy products from the shelf (e.g., walk-aways) in retail shops.

This research is being conducted by to meet the requirements for the degree of Master of Research under the supervision of chief investigator Professor Scott Koslow, Department of Marketing and Management, email: scott.koslow@mq.edu.au.

If you decide to participate, you will be asked to participate in a video recording conducted using eye tracking glasses. The glasses will record your eye-movements, while shopping inside the store, which will enable researchers to understand, what part of aisle, shelves and where on the product package you will be looking at. After the shopping, you will be surveyed and interviewed. The entire task will last for approximately 20 minutes. You will be given a gift voucher worth $\$ 20$ for participating in the study.

Any information or personal details gathered in the course of the study are confidential, except as required by law. No individual will be identified in any publication of the results. Only the named chief investigator and Smitha Nair will have access to the data. The video recording and summary of the results of the data can be made available to you on request.

Participation in this study is entirely voluntary: you are not obliged to participate and if you decide to participate, you are free to withdraw at any time without having to give a reason and without consequence.

I, $\qquad$ have read (or, where appropriate, have had read to me) and understand the information above and any questions I have asked have been answered to my satisfaction. I agree to participate in this research, knowing that I can withdraw from further participation in the research at any time without consequence. I have been given a copy of this form to keep.

Participant's Name: $\qquad$
(Block letters)
Participant's Signature: $\qquad$ Date: $\qquad$
Investigator's Name: $\qquad$
(Block letters)
Investigator's Signature: $\qquad$ Date: $\qquad$

The ethical aspects of this study have been approved by the Macquarie University Human Research Ethics Committee. If you have any complaints or reservations about any ethical aspect of your participation in this research, you may contact the Committee through the Director, Research Ethics \& Integrity (telephone (02) 98507854 ; email ethics@mq.edu.au). Any complaint you make will be treated in confidence and investigated, and you will be informed of the outcome.

## (PARTICIPANT'S COPY)


[^0]:    Analysis of Maximum Likelihood Estimates

