EFFECTS OF VISUAL MERCHANDISING ON YOUNG CONSUMERS’ IMPULSE BUYING BEHAVIOUR

Laurent HUBRECHTS 88-11-14-T392
Beyhan KOKTÜRK 91-07-18-T118

Supervisor : Venilton REINERT
Examinator : Urban LJUNGQUIST
Bachelor Thesis C-level
TITLE : Effects of visual merchandising on young consumers' impulse buying behaviour

AUTHORS NAMES : Laurent HUBRECHTS & Beyhan KOKTÜRK

Marketing report no. Mf: 3:2012:039
Department of Marketing
School of Business and Engineering
Halmstad University
PO Box 823
SE-301 18 HALMSTAD
Sweden
Telephone: +46 35 16 71 00

Halmstad University Reproservice, Halmstad, 2012
Acknowledgments

This bachelor dissertation has been written at the division of Business and Engineering at the University of Halmstad.

The completion of this thesis would not have been possible without the support and assistance of several people.

First, we would like to thank the University of Halmstad for giving us the possibility of writing a bachelor thesis and offering various services such as access to the books of the library.

We want to express our gratitude to our supervisor, Professor Venilton Reinert, for his advice, support and guidance throughout this thesis helping us progressing in this work.

We would also like to thank the many respondents of this study for their precious time and participation providing the basis needed for our research.

Finally, we would like to thank our colleagues and friends for supporting and giving us constructive criticisms throughout this thesis and those who have contributed directly or indirectly to the completion of this thesis.

__________________________  _________________________
Beyhan Köktürk                  Laurent Hubrechts
Abstract

In order to enhance store atmosphere and attract customers, retailers use and implement different techniques such as visual merchandising. These techniques allow retailers to differentiate their offerings from competitors.

The purpose of this thesis is to examine the relationships and effectiveness of different selected visual merchandising techniques on young customers’ impulse behaviour.

The result of the study shows that there is a directional relationship between young customers’ impulse buying tendency and two visual merchandising techniques: in-store product display and product shelf presentation.

This thesis gives insights to retailers as to which visual merchandising techniques can significantly influence young customers’ impulse buying behaviour.

This study also provides information about the techniques that should be part of retailers’ marketing and retailing strategic planning.
# TABLE OF CONTENTS

1 INTRODUCTION ...........................................................................................................1  
1.1 Delimitations ........................................................................................................2  

2 FRAME OF REFERENCE .............................................................................................3  
2.1 Impulse buying : the phenomenon ........................................................................3  
   2.1.1 Model ................................................................................................................4  
   2.1.2 Internal motivators ............................................................................................7  
   2.1.3 External factors .................................................................................................9  
2.2 Visual Merchandising .............................................................................................11  
   2.2.1 Store layout .....................................................................................................15  
   2.2.2 In-store product display ..................................................................................18  
   2.2.3 Promotional signage ......................................................................................20  
   2.2.4 Product shelf presentation .............................................................................21  

3 METHODOLOGY .........................................................................................................23  
3.1 Research hypotheses .............................................................................................23  
3.2 Research approach ...............................................................................................25  
3.3 Type of research ....................................................................................................26  
3.4 Survey development .............................................................................................28  
3.5 Data collection ......................................................................................................29  
3.6 Population and Sample .........................................................................................31  

4 EMPIRICAL DATA ......................................................................................................33  
4.1 Descriptive statistics for demographics ................................................................33  
4.2 Descriptive statistics for variables .........................................................................34  
   4.2.1 Impulse buying tendency ...............................................................................34  
   4.2.2 Visual merchandising techniques ..................................................................38
5 ANALYSIS OF EMPIRICAL DATA ................................................................. 47

5.1 Hypothesis 1: Store layout and Impulse buying ............................. 47
5.2 Hypothesis 2: In-store product displays and Impulse buying ........... 48
5.3 Hypothesis 3: Product shelf presentation and Impulse buying ........ 49
5.4 Hypothesis 4: Promotional signage and Impulse buying ............... 50

6 CONCLUSION .......................................................................................... 53

6.1 Conclusion ......................................................................................... 53
6.2 Implications ...................................................................................... 55
6.3 Further studies .................................................................................. 56

REFERENCES ............................................................................................. 58
LIST OF TABLES

Table 1: Results from a tracking study ................................................................. 17
Table 2: Effectiveness of display locations ............................................................ 19
Table 3: Demographics ......................................................................................... 33
Table 4: Impulse Buying Tendency ......................................................................... 35
Table 5: Impulse Buying Tendency by gender ....................................................... 35
Table 6: Impulse Buying Tendency by age ............................................................. 36
Table 7: Impulse Buying Tendency by grocery spending (month) ....................... 37
Table 8: Visual merchandising techniques ............................................................ 38
Table 9: Visual merchandising techniques by grocery spending (month) .......... 39
Table 10: Visual merchandising techniques by gender ......................................... 41
Table 11: Visual merchandising techniques by age .............................................. 42
Table 12: Correlation between dependent and independent variables ............. 45
Table 13: Coefficients and p-values from standard multiple regression test ....... 46
Table 14: Correlation with Impulse Buying ........................................................... 52
Table 15: Standardized coefficients and p-values from standard multiple regression test ................................................................. 52

LIST OF FIGURES

Figure 1: A model of consumer buying process .................................................... 6
Figure 2: A model of impulse buying process ....................................................... 8
1 INTRODUCTION

In today’s keen competitive environment store image and atmosphere are recognized by retailers as important factors influencing customers’ decision making processes (Hartman and Spiro, 1995).

Kotler (1973, p.50) was the first to define the term atmospherics as “... the conscious designing of space to create certain effects in buyers. More specifically, atmospherics is an effort to design buying environment to produce specific emotional effects in the buyer that enhance his purchase probability”.

Moreover, the term atmospherics refers to the stimuli in the store environment which have a direct influence on customers purchase behaviour. (Akther et al., 1987). Espinoza et al. (2004) (cited in Mayo de Juan & Gültekin, 2009) argue that a pleasing store atmosphere is more likely to increase customers’ willingness to purchase.

Mc Goldrick (2002) stated four dimensions of store atmosphere i.e. visual (sight), aural (sound), olfactory (smell) and tactile (touch), which are significant in customers’ choice of products. As presentation of goods is often the most crucial factor in decision-making (Oakley, 1990), retailers place more importance on visual merchandising in order to differentiate their offers from others due to the similarity of merchandize nowadays.

Basically, visual merchandising can be described as “everything the customer sees, both exterior and interior, that creates a positive image of a business and results in attention, interest, desire and action on the part of the customer” (Bastow-Shoop et al., 1991, p.1). Mills et al. (1995) suggests that “visual merchandising ranges from windows/exterior displays to interior displays including form displays and floor merchandising along with promotion signage.” Many authors state different visual merchandising techniques in the existing literature.

Besides, visual merchandising is also a powerful marketing tool as an external motivator in the consumer’s impulse buying behaviour. Indeed, impulse buying is significant for sales revenue; in fact it represents a substantial volume of goods sold
every year (Bellenger et al., 1978; Clover, 1950; Cobb and Hoyer, 1986; Kollat and Willet, 1967) (cited in Supriya M. Kalla and A. P. Arora 2010).

Generally, impulse buying can be defined as “any purchase that a shopper makes and has not been planned in advance” (Bellenger et al., 1978; Stern, 1962) (cited in Supriya M. Kalla and A. P. Arora 2010). Although, a difference has to be made between “impulse buying” and “unplanned buying”, but will be explain in further details within the definition section.

Many authors have actually studied the effect of store atmosphere on consumer behaviour (Solomon et al. 2004, Espinoza et al. 2004) but only a few of them (Rostocks, 2003) (cited in Supriya M. Kalla and A. P. Arora, 2011) emphasized on visual stimulation as one of the factors that motivate impulse buying. Therefore, this research aims to be a complement to the existing studies on this area.

The purpose of this thesis is to analyse the effectiveness of visual merchandising through different techniques as stated previously on consumer’s impulse buying behaviour in retail grocery stores. In order to achieve that goal, different visual merchandising techniques are studied by means a questionnaire. As a result, this study emphasized on identifying the effects of visual merchandising on impulse buying would therefore be conducted with the research problem of “which visual merchandising technique influences young customers’ impulse buying behaviour in retail grocery stores?”

1.1 Delimitations

For this study, the following limitations have been taken into account:

- Given other dimensions stated by McGoldrick (2002) making up the store environment that affect impulse buying, we will only focus on the visual aspect i.e. visual merchandising.
- Likewise visual merchandising, among all the existing techniques from literature review that we went through, we will only emphasize on floor layout, in-store product displays, promotion signage as well as product shelf presentation.
2 FRAME OF REFERENCE

2.1 Impulse buying: the phenomenon

Basically the phenomenon of impulse buying can be alternatively described as an unplanned buying. Bellenger et al (1978) and Stern (1962) (cited in Kalla & Arora 2011) state it as “any purchase that a shopper makes and has not been planned in advance”. However, Rook (1987) challenges this statement. According to him, not every unplanned buying is made spontaneously i.e. impulsively. A purchase may be considered as a highly involved while still remain highly impulsive and it is possible that some unplanned purchases are rational as well. Iyer (1989) (cited in Kalla & Arora 2011) backed up this assertion by suggesting that “all impulse buying is at least unplanned, but all unplanned purchases are not necessarily decided impulsively.”

However, how can we accurately define an impulse buying? Rook (1987, p.91) (cited in Beatty & Ferrell 1998) defined impulse buying as a phenomenon “when a consumer experiences a sudden, often powerful and persistent urge to buy something immediately”.

From this definition, Beatty and Ferrel (1998) extended it slightly. “Impulse buying is a sudden and immediate purchase with no pre-shopping intentions either to buy the specific product category or to fulfill a specific buying task. The behavior occurs after experiencing an urge to buy and it tends to be spontaneous and without a lot of reflection (i.e., it is “impulsive”). It does not include the purchase of a simple reminder item, which is an item that is simply out-of-stock at home”.

Piron (1991) and Hodge (2004, p. 11) (cited in Harmancioglu, Finney & Mathew Joseph, 2009) proposed a definition of an impulse purchase that includes four criteria. Impulse purchases are unplanned, decided “on the spot”, stem from reaction to a stimulus and involve a cognitive reaction, an emotional reaction, or both.

Stern (1962) (cited in Brodén & Söderberg 2011), on the other hand, contrasts impulse buying by subdividing it into four categories. Firstly, pure impulsive buying refers to a purchase that cannot be categorized in the planned purchasing at all.
This purely spontaneous way to buy is strongly linked to emotional factors. Secondly, *suggestion impulsive buying*, which is a need triggered by the encountering of a new product for the first time, that can only be fulfilled by getting it. Thirdly, *reminder impulsive buying*, i.e. a item that remembers the consumer he/she needs it as soon as he/she sees it. Unlike suggestion impulsive buying, the consumer has knowledge about the product when it comes to reminder impulsive buying, but it is still considered as an impulse purchase. Finally, *planned impulsive buying*, this paradoxical category can be explained by the fact that when the impulsive buyer goes into a store with intention to buy a specific item e.g. clothes, but the choice about the specific item, brand, size and price hasn’t been decided before. The purchasing decision is made at the point of sale. This last category can be seen as the boundary between planned and unplanned buying.

Even though, scholars still have some divergence about the concept of impulse buying (Kalla & Arora 2011). They agree on some points, the speed, on which the buying decisions are made, is the most important distinguishing factor between planned and impulse purchases (Harmancioglu, Finney & Joseph, 2009), as well as, hedonistic behaviour (Park et al., 2006) or affective component (Piron, 1991; Shiv and Fedorikhin, 1999; Weinberg and Gottwald, 1982) (cited in Kalla & Arora 2011) and (Puri, 1996; Rook & Fisher, 1995; Wenn et al, 1998) (cited in Jiyeon 2003).

Meanwhile, what matters for marketers is to find out how can impulse buying occur and figure out what are exactly the stimuli that trigger the impulse buying behaviour.

### 2.1.1 Model

To understand how impulse buying occurs, we have to start from scratch and first have a look at the “normal/planned buying process” before moving onto the “impulse buying making process”.

Churchill and Peter (1998) (Cited in Jiyeon 2003) (Figure 1) suggested a model from the generic model of buyer decision process to describe this natural process. Indeed, according to the generic model consumers go through a five-step decision-making process in a non-impulse purchase, which are need recognition, information
search, alternative evaluation, purchase decision and post-purchase evaluation. Peter and Churchill adapted this model by adding that this consumer buying process is also shaped by social, marketing and situational influences.

![Figure 1: A model of consumer buying process](image)


The purchasing process starts with need recognition – the buyer recognizes a need. This recognized need can be triggered by internal or external stimuli. Once the need is identified, consumer will start seeking for information. At this level, consumer will process the information and may take the buying process to the next level, which is the purchase decision. Finally, he will assess his satisfaction or dissatisfaction toward the purchased product. This final step is crucial for the store because a satisfied customer may develop loyalty towards the store where he bought the item. The process will start over, as the consumer needs another product.

This buying decision process is shaped by social, marketing and situational influences. Firstly, social factors involve geographic and sociologic influences, which are culture, subculture, social class and family that affect the consumer’s behaviour through direct and indirect messages and feedbacks. Sticking to the social factors, reference groups also affect consumers’ thoughts, feelings, and actions. Secondly, marketing influences, known as the 4P’s (Product, Price, Place, Promotion), also have an impact on the process. Finally, situational influences, which can be described as the characteristics of the situation or the circumstances surrounding the shopping
trip. Those include the physical surroundings, social surroundings, time, task, monetary conditions, and monetary moods. Among those situational influences, some of them will be later explain in further details within the external motivator section (Jiyeon, 2003).

Unlike planned purchase, impulse buying does not result from an information search to satisfy a particular requirement since the fulfilment may come from the act of shopping itself. Therefore, considering the nature of impulse buying, several pre-purchase steps from the generic model can also be skipped and omitted such as need recognition, information search, alternative evaluation and reclassifying influencing factors. Consumer’s impulse buying process begins now with the browsing, followed by create desire before entering the purchase and the post-purchase stage. They are also no longer affected by social, marketing and situational influences but by internal and external factors. As a result, an adapted model from the previous model (Figure 1) and a more appropriate model for this study can be drawn (Figure 2) to describe the impulse buying process. This suggested model is adapted from Kalla and Arora’s (2011) literature review on impulse buying in relation with Jiyeon’s work (2003).
In contrast to Churchill and Peter’s purchasing process model (Figure 1), the impulse buying process begins with browsing in the store to stimulate product awareness. While browsing, impulse buyer stumbles across stimuli, which create desire and trigger urge to buy on impulse. As opposed to the generic model, at this stage, impulse buyer may directly feel the desire to purchase the item without having to look for information or evaluating alternatives. But similarly to the generic model, once the product is purchased the post-purchase evaluation stage will also occur (Jiyeon, 2003).

Regarding this adapted model (Figure 2), the impulse buying process is shaped by internal and external motivators that trigger consumer’s urge to buy on impulse.

According to Hoch and Loewenstein (1991) (cited in Supriya M. Kalla and A. P. Arora 2011), an impulse purchase is the result of “strong enough stimulation and motivation that can override restraints”. As a result, in order to get a comprehensive understanding over the phenomenon of impulse buying, we will also need to investigate more deeply those internal and external motivators. The former is internal to the individual itself and the latter refers to the shopping environment.

2.1.2 Internal motivators
Shapiro (1992) describes these factors as unexpected desire to go out and buy
something without direct visual confrontation. Among them, there is self-discrepancy i.e. a difference between actual self and ideal self (Kalla & Arora 2011). Dittmar (2005) found that this behaviour leads excessive shoppers to be more motivated to buy, in order to strengthen their self-image and they reported greater “gaps” between how they see themselves (actual self) and how they wish to be seen (ideal self). They did more impulse buying and they regret it more. Verplanken et al. (2005) assert that low self-esteem is also a source that leads to impulse buying as a mean of psychological relief.

Another internal motivator is the hedonic needs. “This term is defined as those facets of consumer behaviour relating to multi-sensory, fantasy and emotive aspects of one’s experience with products” (Kalla & Arora 2011, p149). Singer (1966) suggests that hedonic consumption is tied to imaginative constructs of reality. What consumers desire reality to be is what hedonic consumption acts are based on, rather than what consumers know to be real. This motivator can be related to the concept of self-discrepancy described above (Dittmar, 1992; Lunt and Livingstone, 1992). This dissimilarity between real and desired could play a role in invoking impulse.

Piron (1989, 1991) noticed another important stimuli in motivating impulse purchases, which are autistic stimuli. Autistic thoughts are resulted in response to internal impulses and are self-contained and self-serving (Kalla & Arora 2011). They don’t follow logic or rationality and are frequently associated with emotion and sensuality. Consequently, Hirschman (1985) asserts that autistic stimuli can have strong suggestive power and can result in impulse buying.

Mood states play also an importance role that leads to impulse buying. Some people lose themselves in impulse purchase in order to relieve unpleasant mood (Elliott, 1994) but also to cheer up themselves (Mick and DeMoss, 1990). Similarly, Youn and Faber (2000) had suggested in a study that positive and negative feeling states are potential motivator for impulse buying. Verplanken et al. (2005) took up this feelings states concept in a more recent research, and even suggest that negative rather than positive affect is a driving force behind chronic impulse buying.
2.1.3 External factors

Unlike internal motivators, external factors are those that retailers can influence. Here, consumer impulse purchasing behavior is influenced and triggered by many shop related factors such as visual stimulus, shopping format, self-service, store environment, discounts, display, shelf space, ambient factors, social factors perceived crowding, ownership of credit card (Kalla and Arora, 2011).

**Visual stimulus** encountered accidentally by the shopper can generally be the product itself (Liang and Meng, 2008) or promotional signage (Piron, 1991). Rook and Hoch (1985) suggest that consumer impulse buying is driven by the environmental stimulus and is followed by an unexpected urge to obtain it (I see I want to buy). According to previous research on “impulse buying” related to “encounter with the object”, the latter one is seen as a very powerful trigger to the act of impulse buying (Kalla and Arora, 2011). Sticking to Rook’s researches (1987), he suggests that it is hard for consumers to refrain from the urge in the moments following their encounter with the object. Therefore, Vohs and Faber (2007) assert that touching, tasting, sniffing and physical proximity with the product bolster the desire to purchase it.

**Social factors**, which embrace store employees and other customers, are considered by Mattila and Wirtz (2008) as external factors that influence impulse buying as well. Past research findings show that employee behaviour and helpfulness of salespeople enhanced the willingness to buy (Bittner, 1990; Baker et al., 1994). However, Rook and Fisher (1995) challenge this social factors concept. According to them, anonymity might encourage impulse purchasing. This idea is supported by Lethonen and Maenpaa (1997); Stern (1962) who recognized that **self-service environment** is an impulsive purchase factor. Indeed, it enhances the shopping pleasure and as a result, the shopper, who is free and unwatched, is more likely willing to try on “new things and styles and fantasize, wrapped in the anonymity of a self-service environment” (Supriya M. Kalla and A. P. Arora 2011).

However, a contrast has to be made between self-service environment and in-store browsing. Jones et al. (2003) considered **in-store browsing** as creating encounters with desirable products that may evoke an appeal to buy. This urge is
getting harder to refrain from due to physical proximity of the product. Consequently, malls and department stores have come up with a list of “things to focus on”, which includes specific roles that different forms of in-store signage have to play, in order to effectively increase sales (Woodside and Waddle, 1975; Abratt and Goodey, 1990). On similar lines, Rostocks (2003) states that one of the main reasons, which urge people to buy, is “looked good on shelf” i.e. visual merchandising, which has significant impact on impulse buying. Mattila and Wirtz (2008) suggest that achieving to stimulate the store environment increases the likelihood of impulse buying because it leads to a momentary loss of self-control.

As this thesis aims to study the effectiveness of visual merchandising on impulse buying behaviour we will have a deep focus on this external motivator within the next section.
2.2 Visual Merchandising

Many authors proposed various definitions to the term “visual merchandising”; Walters & White (1987) define visual merchandising as the “... activity which coordinates merchandise selection with effective merchandise display.”

Ebster and Garaus (2011, p.77) define visual merchandising as “the art and science of presenting products in the most visually appealing way”, emphasizing on the communication with the customers through images and presentations.

Bastow-Shoop et al (1991) define this term as “everything the customer sees, both exterior and interior, that creates a positive image of a business and results in attention, interest, desire and action on the part of the customer”.

Diamond & Diamond (2003) emphasize on the purpose of visual merchandising in their attempt to define the concept visual merchandising. The authors state that visual merchandising can be defined as the presentation of a store and its merchandize in ways that aim to attract the attention of potential customers and motivate them to make purchases.

An effective visual merchandising helps boosting the sales of products that will almost sell themselves. Retailers pursue through visual merchandising the basic objective of attracting customers in order to sell merchandize (Bastow-Shoop et al., 1991). Visual merchandising is therefore concerned with both how the product and/or brand are visually communicated to the customer and also whether this message is decoded “appropriately” (Wanninayake & Randiwela, 2007).

The role of visual merchandising as stated by Schimp (1990) (Cited in Gajanayake, Gajanayake, & Surangi, 2011) is to:

• create awareness among customers about a product and provide relevant information about it;
• remind customers about the benefits of a product and of its availability;
• encourage customers to buy a particular product or brand;
• maximize the utilization of space, while at the same time making the buying experience as easy as possible for customers;
• reinforce the retailer’s communications campaign;
• assist the customers in locating, evaluating and selecting a product.
Visual merchandising ranges from interior to exterior presentation; according to Mills et al. (1995), it includes window – exterior displays, interior displays such as form displays, floor – wall merchandising along with promotion signage.

Omar (1999) suggested three different kind of interior displays: merchandise display, point-of-sale display and architectural display (Cited in Kerfoot et al., 2003).

Other visual merchandising techniques and aspects are also mentioned in the literature such as space-floor layout, merchandise presentations, shelf space techniques, lighting, colour, cleanliness,… (Harris, 1998 (Cited in Young et al., 2007); Kerfoot et al., 2003; Agnihotri & Oburai, 2009; Gajanayake et al., 2011)

Window display is an important visual merchandising technique and marketing tool that has a big impact on the customer’s decision to enter the store. This technique is defined as “Any kind of visual presentation of merchandise in the façade level in order to attract attention and ultimately to enter the store (Jiyeon, 2003, p. 5).

Bustos (2004) argues that retailers often neglect their window presentation while designing their store. He also states that using mannequins, creative flooring, fixtures and backdrops can enhance the power of attraction of window displays (Cited in Iqba et al., 2011).

One particular type of display is the form display or the so-called mannequin display. This kind of display allows customers to visualize outfits and gives an idea about how it will look like on. Moreover, mannequins enhance the visual appeal of displayed products which is an important factor stimulating purchases (Iqba et al., 2011; Kerfoot et al., 2003; Kotler, 1974 (Cited in Kerfoot et al., 2003)).

Some authors consider the cleanliness of a store as an important store attribute that projects an image of luxury that attracts customers, creates a pleasant atmosphere and retains them in stores (Yun and Good, 2007 (Cited in Gajanayake et al., 2011)).
According to a study carried out by the M/A/R/C® Research and National In-Store, 14 per cent of the surveyed claimed that they will stop visiting a store if the level of cleanliness is not as expected.

Store cleanliness impacts the willingness of customers to shop, the frequency of shopping and the length of time customers are keen to shop. (Carpenter and Moore, 2006 (Cited in Gajanayake et al., 2011); Ebster & Garaus, 2011)

Furthermore, store components such as lighting and colours are also considered as part of the visual merchandising techniques. For instance, several researches have studied the psychological and physiological effects of colours. One finding is that warm colours such as red are associated with increased blood pressure, high respiratory rate (Gajanayake et al., 2011).

Moreover, Bellizzi et al. (1983) undertook a laboratory-based experiment in order to study the effect of colours upon attraction to displays and store image. Researchers found that warm colours would be more appropriate for store windows, entrances and environment or department triggering unplanned purchases.

However, warm colours could create an unpleasant environment where an important buying decision is likely to be made (Cited in McGoldrick, 2002).

Regarding the lighting point of view, Summers and Herbert (1999) state that better-illuminated merchandize may encourage customers to shop around, and increase the probability of making a purchase (Cited in Gajanayake et al., 2011).

Rook (1987) claimed that bright lighting in stores could trigger impulse purchases. Besides, Markin et al. (1976) propose that softer lights may induce examining merchandize (Cited in McGoldrick, 2002).

On the other hand, Areni and Kim (1994) noticed that bright lighting stimulates product browsing in a wine store but not especially, affecting the sales level. Thus, customers handle and examine more items under brighter lights than softer lights (Cited in McGoldrick, 2002).
As to the remaining visual merchandising techniques, they will be described in more details in the frame of reference, i.e., store layout, in-store product display, promotion signage and product shelf presentation.

Those different techniques are being implemented depending on the type of store and product displayed. Thus, some of them may not be used in a certain store settings; for instance, clothes and apparel are presented using different techniques than those used for vegetables in supermarkets (Ebster & Garaus, 2011).

According to a survey carried out by Display and Design Ideas (DDI) magazine investigating the retail industry in 2011, more than 80 percent of the respondents claimed that the value of the design, planning and visual merchandising or components in retail has grown compared to five years ago. Moreover, half of the respondents stated that nowadays those elements become much more important.

Moreover, a previous survey conducted in 2005 by DDI magazine about the VM industry have mentioned the biggest challenges for visual merchandising as seen by respondents:

- Rising costs of materials
- Shakeout from the merger/
- consolidation of major retailers;
- lots of displaced talent
- Staffing—attracting creative talent
- Developing meaningful content for
- the digital medium
- Evaluating the viability of technology
- Budgets, especially for technology
- Properly trained personnel
- Lack of available talent
- Price wars via signs
- Being creative within budget confines
- Narrowing field of vendors

As up to 90 percent of the cues issued by the environment are perceived by sight (Edwards and Shackley, 1992) (Cited in Kerfoot et al., 2003), retailers are aware of the importance of providing efficient visual communication through interior and exterior presentation. Thus, visual merchandising is a major concern and factor in the success or failure of a retail store.
Visual merchandising is an important element of a store setting. It enables stores to attract and motivate customers to spend more time in the store, help them finding and selecting products they are looking for, encourage them to purchase items planned or unplanned as well as projecting a good overall image of the store (Bastow-Shoop et al., 1991; Gajanayake, Gajanayake, & Surangi, 2011).

Regarding the different existing techniques of visual merchandising partly stated in the previous section, only the following selected techniques will be described and investigated through this thesis.

- Store layout
- In-Store product display
- Promotion signage
- Product presentation

2.2.1 Store layout

Store layout, also known as floor layout (Davies & Tilley, 2004), refers to how the different sections and aisles of a store are organized with the basic and simple objective of getting customers shop longer and buy more.

Shoppers make most of their purchases decisions based on visual influences (Davies and Tilley, 2004). Therefore, designing a store layout which can have positive impacts on customers’ decisions is important. Nowadays retailers benefit from computer software to plan their layout more efficiently and maximize turnover.

Many different types of layouts exist and retailers’ choice is often made considering first the merchandize type (McGoldrick, 2002).

The most common layouts retailers chose to implement in their store are the grid pattern layout, the free-flow layout, forced-path layout.
• The grid pattern layout is a layout traditionally favored by supermarkets, drugstores,... This store setting is characterized by long aisles, rows of parallel fixtures arranged in a rectangular pattern.

The grid pattern layout increased the exposure of products consequently by forcing customers to walk around the store. As a result, products such as meat, fish and dairy products are usually placed at the back of stores in order to increase the customer flow inside the store and the exposure to a wider range of products.

By its arrangement it also allows a better coverage of the store where little space is not covered.

Moreover, the grid pattern layout has several advantages such as efficient usage of floor space, simplification of the inventory control and ease of product finding (McGoldrick, 2002; S.Ong, 2002).

• The free-flow layout is characterized by aisles, displays and shelves placed in a free-flowing pattern. Hence, more freedom of movement is allowed to customers who can walk around different fixtures of a store. Unless the grid pattern layout many fashion stores use a free-flow layout.

Boutique layout is one of the most used forms of free-flow layout where each merchandise group, departments or sections are displayed in a separate area.

The free-flow layout offers several advantages different from the previous described layout. Indeed, this particular layout enhances the store atmosphere and the visual appeal to customers.

Moreover, it encourages shoppers to move in a relaxed and free flow and to browse the merchandize who are more likely to make unplanned purchases. On the other hand, the cost inherent to this specific layout can be higher compared to the grid pattern layout (Ibid).

• The forced-path layout is a type of layout that forces customers to take a certain path through the store and optimizes customer contact with product as they pass by every aisle. This particular layout increases the chances of unplanned purchases as
well as potentially irrates customers. For instance, IKEA use the forced-path layout in its stores.

Peter and Olson (1998) stated that supermarkets are designed with the aim of directing customers to the store’s sides and back walls where the most sought-after and high-margin items are displayed (Cited in S.Ong, 2002).

According to a study published by Progressive Grocer in 1975 (Table 1) showing the results of a tracking study carried out in a supermarket, 95 percent of shoppers passed through aisles where product categories such as fresh fruit, meat and vegetable were displayed and round 93 percent of passers actually made a purchase (Cited in McGoldrick, 2002).

<table>
<thead>
<tr>
<th>Aisle</th>
<th>Main Categories</th>
<th>% shopper who pass</th>
<th>% passers who buy</th>
<th>% with the flow</th>
<th>% against the flow</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Fresh fruit, meat, vegetables</td>
<td>95</td>
<td>93</td>
<td>93</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>Sauces, charcoal, baby foods</td>
<td>77</td>
<td>90</td>
<td>73</td>
<td>11</td>
</tr>
<tr>
<td>3</td>
<td>Soap, health and beauty aids</td>
<td>69</td>
<td>68</td>
<td>80</td>
<td>10</td>
</tr>
<tr>
<td>4</td>
<td>Household goods and cleansers</td>
<td>59</td>
<td>59</td>
<td>75</td>
<td>20</td>
</tr>
<tr>
<td>5</td>
<td>Detergents, hosier, sewing</td>
<td>63</td>
<td>83</td>
<td>75</td>
<td>19</td>
</tr>
<tr>
<td>6</td>
<td>Kitchen, auto, paint, toilet rolls</td>
<td>58</td>
<td>78</td>
<td>81</td>
<td>14</td>
</tr>
<tr>
<td>7</td>
<td>Paper towels, tea, coffee, milk, petfoods</td>
<td>80</td>
<td>88</td>
<td>58</td>
<td>33</td>
</tr>
</tbody>
</table>

Table 1: Results from a tracking study


As underlined by Park et al. (1999), store layout exerts major influences on unplanned buying ad brand switching. His study found that in unfamiliar store
environments, the level of unplanned buying is higher due to the difficulties in finding the intended products.

Moreover, high-demand items such as fresh fruits, vegetables are usually placed close to the entrance in order to overcome buyer inertia and inhibitions that customer may have about spending their money (Davies and Rands, 1992) (Cited in McGoldrick, 2002).

As customers need a few time to orient themselves in the new environment, i.e the store and adjust to the numerous stimuli inside the store after passing by the transition zone (Underhill, 1999), the placement of high-demand items at the entrance could allow customers to focus to the new environment.

Many authors in the literature defined store layout as an important stimulant of unplanned purchases (Iyer, 1998).

Crawford and Melewar (2003) state that the presence of a well-trained salesperson can increase the impulse purchases by helping and guiding the customer in the purchase process.

2.2.2 In-store product display

Interior or in-store displays can be put into three different categories as suggested by Omar (1999) (Cited in Kerfoot, 2003): merchandize display, architectural or artistic display and point-of-sale display generally located where the customer is about to pay for the purchases, usually near the checkout area.

Merchandize display, mostly gondola for the case of grocery stores and supermarkets, whose purpose is to guide and coordinate customers’ merchandise selection (Khakimdjanova and park, 1995) will be described in more details in the section: product presentation.

The purpose of in-store or interior displays is to create desire for the merchandise as well as promoting both planned and unplanned buying (Bastow-Shoop et al., 1991).
The importance of having good, attractive displays can be crucial for retailers. In fact, customers will be attracted to a display within three to eight seconds which is the time needed for them to determine interest in a displayed product (Ibid).

The elements considered in designing a display include balance, proportion, rhythm, emphasis, color, lighting and harmony (Ibid).

Product placement has been identified as in-store stimuli influencing impulse and unplanned buying (Abraham & Goodey, 1990). Stern (1962) quoted store displays as determinant of impulse buying (Cited in Asim & Saf, 2011).

Nowadays retailers are keen to increase the magnitude of impulse and unplanned purchases in stores through product and store displays and product mixtures. (Hoyer and MacInnis, 1997; Jones et al., 2003; Gutierrez, 2004; Michon et al., 2005; Schiffman and Kanuk, 2007; Lee and Kacen, 2008; Tendai and Crispen, 2009) (Cited in Ibid).

According to Davies and Tilley (2004), more than 50 per cent of purchases made by shoppers in supermarkets are pre-planned and the remainder is mostly influenced by stimuli sent by product displays which are one of the most influential factors on unplanned purchases.

According to a study (Table 2) investigating the short-term effectiveness of displays located in four different locations, the displays placed at the entrance of the first aisle achieved the most effects, leading to an increase of 363% upon normal sales (Dyer, 1980) (cited in McGoldrick, 2002).

<table>
<thead>
<tr>
<th>Location of Displays</th>
<th>Increase upon Normal sales %</th>
</tr>
</thead>
<tbody>
<tr>
<td>On back of store</td>
<td>110</td>
</tr>
<tr>
<td>Mid-aisle in front of checkouts</td>
<td>262</td>
</tr>
<tr>
<td>On front of store gondola end</td>
<td>153</td>
</tr>
<tr>
<td>At entrance to first aisle</td>
<td>363</td>
</tr>
</tbody>
</table>

Table 2: Effectiveness of display locations

Based on the findings of the data collected by Asim and Saf (2011) through questionnaires among 100 buyers in Islamabad and Abbotabad, investigating the effects of in-store environment on consumers’ impulse buying decisions, attractive store displays have been identified as important determinant of impulse buying decisions. Thus, a significant relationship has been found between store displays and impulse buying, implying that product displays provide effective stimuli that lead customers to make purchases emotionally.

2.2.3 Promotional signage

Promotional signage is defined as a “wording used either alone or in conjunction with in-store display to convey product or promotional information to customers with the purpose of informing and creating demand for the merchandise” (Jiyeon, 2003).

According to the Point of Purchase Advertising Institute (POPAI), in-store advertising, such as point of purchase (POP) displays and in-store signage influences 53 to 60 per cent of consumer purchases. In-store signage, promotional signage included, provides information helping customers in their buying decisions. Effective promotion signage can help stores boosting their sales and increase their revenues.

Authors in the literature acknowledge the importance and effects of in-store advertisements and all types of promotion including promotion signage on unplanned purchases. In-store advertisements have an high impact on increasing the number of impulse buying (McClure and West, 1969; Woodside and Waddle, 1975; Wilkinson et al., 1982; Inman et al., 1990) (Cited in Asim & Saf, 2011). Consumers tend to make impulse purchases influenced mostly by in-store promotional stimuli (Bell et al., 2011) (Cited in Asim & Saf, 2011).

Moreover, regarding the different elements that can lead to an impulse buying, low prices including price reductions, sales promotion and discounts are considered as having direct effects on consumers’ buying decisions. (Stern, 1962; Thaler, 1985; 1999; Tendai and Crispen, 2009) (Cited in Asim & Saf, 2011).

Many authors argue that those determinants are likely to convince and lead buyers to an unplanned purchase (Abratt and Goodey, 1990; Grewal et al., 1998;
Dittmar and Drury, 2000; Youn and Faber, 2000; Laroche et al., 2003; Virvilaite et al., 2009) (Cited in Ibid).

2.2.4 Product shelf presentation

Product placement on shelves is an important factor influencing sales and shopper’s buying behavior (Dreze, Hoch, & Purk, 1994) (Cited in Sigurdsson et al., 2009). Eye movement studies in stores observed that most of the shoppers ignore up to one third of the packages on the shelves (Young, 1987) (Cited in Larson, 2006).

This finding underlines the importance for retailers to highlight the items they want to sell (Ibid).

Product placement on shelves also affect customers brand recognition. Customers have implicitly learned that retailers tend to allocate the top positions on the shelves to top brands (Ebster & Garaus, 2011).

A gondola can be divided into four vertical zones receiving all different degree of attention from customers browsing aisles.

- Stretch level (>6 ft)

- Eye level (4-5 ft)

- Touch level (3-4 ft)

- Stoop level (<3 ft)

Researchers suggest that products placed at shoppers’ eye receive more attention and have a higher probability of being selected than products placed either above or below. In supermarkets best-selling articles are usually displayed where customers can find them with ease. The touch level zone located approximately at shopper’s waist height gets valuable attention, more than the remainder zones (Ebster & Garaus, 2011; Larson, 2006).

Eye-movement studies found out that all the shelf locations do not attract equal attention from customers browsing products. Researchers argue that products displayed at eye level or with more facings can trigger impulse buying and are more
likely to catch attention and be noticed (S.Ong, 2002; Brand, 1963; Rook, 1987; Drève, Hoch, and Purk, 1994).

The shelf position also influences the sales of supermarkets products. Given the natural tendency of customers to focus on the products located at eye-level (Abratt and Goodey, 1990; Peak & Peak, 1977).

Drève, Hoch, and Purk (1994) found that vertical position (row) on the shelves has higher impact than horizontal position (column) on customers.

Christenfeld (1995) states that when several packages of identical products are displayed side-by-side on a shelf; customers have a tendency to choose the product at the middle. Shaw and colleagues (2000) explain this tendency based on recall data because central positions receive more attention from buyers (Cited in Chandon et al., 2009).

Raghubir and Valenzuela (2008) relate that customers believe that retailers place expensive, high-quality brands on top shelves and cheaper brands on the bottom shelves (Cited in Chandon et al., 2009). They illustrate it by stating that customers when purchasing a bottle of wine among unfamiliar brands intentionally choose the brands located at the top or in the middle of vertical displays and the brands located in the center of horizontal displays (Ibid).

According to findings from shoppers’ surveys and field experiments, large variations in shelf space have a big impact on sales of products even when the price and location remain unchanged (Inman, Winer, and Ferraro 2009; Chevalier, 1975; Curhan, 1974; Inman & McAlister, 1993; Campo & Gijsbrechts 2005) (Cited in Ibid).

Hoyer (1984) proposes that shelf effects are higher when customers are not highly involved in the purchase process due to factors such as lack of time,...
3 METHODOLOGY

In this chapter, the methodology of our dissertation will be outlined. Moreover, this chapter will provide an overview about how our study has been conducted. It will also describe the research hypotheses, research approach, research type, data collection, sample selection and limitation of this study.

3.1 Research hypotheses

According to Selamat (2008), hypotheses are tentative, intelligent guesses posited for the purpose of directing one’s thinking and actions towards the solution of a problem. A research hypothesis can be defined as “a prediction or conjecture about the outcome of a relationship among attributes or characteristics” (Creswell, 2005, p. 117) (Cited in Ellis & Levy, 2009).

Moreover, Glassmann (2007) state that hypotheses derive from theory and are used whether to validate, revise or invalidate theories through research.

Hypotheses guide the study in terms of methodology and research design, data analysis procedure, arrangement of research sections, discussions of research findings, etc.

They always point a possible influence of a variable - the independent variable on the problem variable (Nenti, 2009).

In this study, buyer’s impulse purchase tendency and selected visual merchandising techniques are meant to be the variables which allowed us to define the hypotheses of our research.

After reviewing the literature (cfr. Frame of Reference), we noticed that chosen four visual merchandising techniques are influencing customers’ impulse buying to a certain extent. Therefore, the following hypotheses have been stated which will enable us to investigate the relationships between the two variables: buyer’s impulse buying tendency and selected visual merchandising techniques, i.e store layout, in-
store product display, promotional signage and product shelf presentation in grocery stores.

**H1:** *Store layout influences and increases the customers' tendency of impulse buying in grocery stores.*

**H2:** *In-store product displays influence and increase the customers' tendency of impulse buying in grocery stores.*

**H3:** *Promotional signage influences and increases the customers’ tendency of impulse buying in grocery stores.*

**H4:** *Product shelf presentation influences and increases the customers' tendency of impulse buying in grocery stores.*

Hypothesis 1 aims to discover whether there is a significant relationship, correlation between customers’ impulse buying behavior and the layout of the studied store and if this visual merchandising technique enhances this behavior.

Hypothesis 2 plans to find out whether there is a significant relationship, correlation between customers’ impulse buying behavior and the product displays in stores and if this visual merchandising technique enhances this behavior.

Hypothesis 3 has as purpose to discover whether there is a significant relationship, correlation between customers’ impulse buying behavior and the promotional signage displayed in stores and if this visual merchandising technique enhances this behavior.

Hypothesis 4 intents to find out whether there is a significant relationship, correlation between customers’ impulse buying behavior and the way products are placed on the stores’ shelves and if this visual merchandising technique enhances this behavior.
3.2 Research approach

Holme and Salvang (2001) propose two different methodological approaches when conducting a research:

- Quantitative research approach
- Qualitative research approach

These two approaches are not exclusive and researchers tend to combine two types of approaches – called mixed models within their research. The choice is driven by a large range of factors such as data availability, purpose of the research, sample etc. (Dow, 2002).

According to Punch (1998), a quantitative research is an empirical research where the data are in the form of numbers and a qualitative research is empirical research where the data are not in the form of numbers (Cited in Hughes, 2006).

The quantitative research is described as an objective, systematic process that tests, examines cause and relationships effect with the use of a deductive process of knowledge attainment. The quantitative research converts information into digit in order to analyze statistically (Holmen & Solvang 1997). This type of approach tests theory deductively from the existing knowledge through hypothesized relationships (Duffy, 1985; Burns and Grove, 2001) (Cited in Charoenruk, 2006).

A qualitative study consists of studying specific phenomenon or facts in the place where it actually happens (Tebelius, 1987). The qualitative research tests theories inductively without any intention of quantifying findings. The aim of qualitative research is to describe certain aspects of a phenomenon relying on the researcher’s interpretation of the situation (Cormack, 1991; Leach, 1990 (Cited in Charoenruk, 2006); Holmen & Solvang, 2001). Qualitative research often involves fieldwork in order to make observations which will lead to hypotheses and theories (Merriam, 1998). Whereas quantitative researches concern studies where the data can be analyzed in terms of numbers, qualitative researches focus on describing events, persons, defining problems scientifically without the use of figures (Best & Khan, 1989).
Our methodological approach is oriented towards collecting numerical data and to analyze them statistically.

Therefore, the main research approach of our thesis is a quantitative research. Throughout the research we intend to measure, quantify the effectiveness of the selected visual merchandising techniques over the second variable, i.e. shoppers’ impulse buying behavior in terms of figures, to examine correlation between those two variables and the extent to which visual merchandising affect customers’ impulse buying tendency in order to give insights to retailers about the most effective visual merchandising technique.

3.3 Type of research
Researchers identified three main types of research which will be described briefly (Aaker & Day, 1990; Yin, 1994):

- Exploratory research
- Descriptive research
- Explanatory – Causal research

Exploratory research
According to Yin (1994), an exploratory research is used when the research aims to develop new propositions for future research.

According to Saunders et al. (2000), this kind of research is conducted when researchers aim to find out “what is happening”, to ask questions, to analyze findings from another perspective.

This type of particular research is useful when the research area is new or vague, when researchers lack clear ideas about the studied problem area that we will try meet throughout the research (Emory & Cooper, 1991).
Moreover, key skill requirements in exploratory research are the ability of observation, gathering information, making explanation i.e. theorizing (Ghauri & Grønhaug, 2005). The different ways to conduct an exploratory study are experience survey, focus groups, literature search (Emory & Cooper, 1991).

**Descriptive research**

While conducting a descriptive research, researchers intend to describe the characteristics of a phenomenon or population (Zikmund, 2000). “The objective in a descriptive study is to learn the who, what, when, where and how of a topic” (Emory & Cooper, 1991, p.148).

A descriptive research may be more appropriate when the problem is structured and organized (Widersheim – Paul & Eriksson, 2001; Ghauri & Grønhaug, 2005).

The key characteristics of descriptive research are structure, precise rules and procedures (Ghauri & Grønhaug, 2005, p.59).

**Explanatory - Causal research**

An explanatory research is research whose problem is well structured that seeks to determine the effect that a variable has on another (Emory & Cooper, 1991).

According to Reynolds (1971), the purpose of an explanatory research is to develop precise theory which will be used to explain empirical generalizations.

In this type of research, researchers face cause-effect problems and they have to isolate variables and determine to what extent cause(s) result(s) in effect(s) (Ghauri & Grønhaug, 2005).

This thesis can be considered as being an explanatory or causal research given the main purpose of this study which is measure the effects of chosen visual merchandising techniques upon shoppers’ impulse buying behavior.

Therefore, the thesis uses an explanatory approach to answer the stated research hypotheses and research purpose.
3.4 Survey development

The method used for this research was based on a survey including close ended question. Questions were developed and adopted from literature review.

The questionnaire is made up of 5 major sections (Appendix 1, Section A to E). The first measures the consumer impulse buying tendency. The others 4 try to study the impulse buying phenomenon together with the four visual merchandising techniques chosen for this study (i.e. store layout, in-store product display, promotional signage and product shelf presentation in grocery stores). A sixth section (F) is also included to determine the respondents’ profile such as gender, age, average spending on grocery shopping and professional status.

A five-point Liker scale ranging from strongly disagree=1 to strongly agree=5 was used to measure each variable (section A–E). Respondents were asked to circle the number that best characterized their answer.

The first section (A) consists of questions that were developed by Rook and Fisher (1995) to measure "a consumer's tendency to buy spontaneously, unreflectively, immediately, and kinetically".

The second section (B) includes questions related to the influence of store layout on consumer impulse buying behavior. This section helps us to see if the respondent was influenced by the store layout when he/she made a purchase decision and to find out whether getting customers shop longer make them buy more.

The third section (C) is made up of questions concerning impulse buying behavior influenced by in-store product display. This section provides us information whether the respondent was influenced by the desire and attractiveness created by product display when he/she made a purchase decision.

The fourth section (D) consists of questions related to impulse buying behavior influenced by product shelf position. This section helps us to find out if the respondent was influenced by the product placement on shelves when he/she made a purchase decision.
The fifth section (E) includes questions concerning impulse buying behavior influenced by promotional signage to see if the respondent was influenced by any kind of signs with discount purposed when he/she made a purchase decision.

Finally, the last section (F) is made up of demographic questions related to gender, age, average spending on grocery shopping and professional status.

3.5 **Data collection**

During their research process researchers have to collect data in order to answer their research question or purpose. Moreover a choice concerning the data collection method has to be made.

Researchers can collect data trough several means such as observation, experiment, interview, survey, focus group,…

Nevertheless the choice of data collection depends upon the type of data needed (Ghauri & Grønhaug, 2005).

In general any form of data can be classified into two data sources: primary and secondary data (Emory & Cooper, 1991).

**Primary data** are original information collected by researchers especially for the research problem at hand (Ibid).

Primary data can be obtained from different sources such as experiment, observations and communication including surveys and interviews (Ghauri & Grønhaug, 2005; Emory & Cooper, 1991).

Compared to secondary data, primary data can be more consistent and homegenous with the research objectives due to the fact they are collected by researchers for a particular project at hand. The required information may not be available through secondary data (Ibid).

On the other hand, collecting primary data take long time and can be difficult to get access; finding consumers who are willing to cooperate and answer questions is not an easy task (Ghauri & Grønhaug, 2005).
Primary data can cover different subjects such as status, intentions, motivations, behavior, lifestyle, attituted,... (Ghauri & Grønhaug, 2005)

Secondary data are information collected by others for purposes that can be different.

This category of data includes sources such as books, online data sources such as webpages, catalogues, journals, etc...

Secondary data can be either from an internal or external source. Internal sources concern information on customers, suppliers, competitors and so on available in previous invoices, warranties, brochures and catalogues. External sources consist of published external sources such as published books, journals articles and data collected by commercial organizations in order to sell them (Ghauri & Grønhaug, 2005).

The data collections method we chose for our thesis is face-to-face surveys in order to collect primary data and find answers to our hypotheses.

According to Emory and Cooper (1991), to survey is to question and record their responses for analysis (p.318).

Surveys and questionnaires are popular data collection methods in business studies. Questionnaires can be either descriptive or analytical (Ghauri & Grønhaug, 2005).

An analytic survey aims to test a theory by taking the logic into consideration (Simons, 1987) (Cited in Ghauri & Grønhaug, 2005).

This particular type of survey needs to specify the independent, dependent and extraneous variables. In addition, the questions and variables need to be carefully made and include measurement scales.

Descriptive surveys are surveys which aim to identify phenomena whose variance we wish to describe (Ghauri & Grønhaug, 2005, p.126).
This particular type of survey are usually carried out in order to obtain consumer attitudes regarding a certain product (Reeves & Harper, 1981) (Cited in Ghauri & Grønhaug, 2005).

Furthermore, a decision in regards to the way the data will be collected through surveys. Questionnaires can be either sent by mail or email awaiting for answers or filled with the responders by telephone or face-to-face. E-mail or post surveys can be less expensive and time consuming than personal interviews but a higher rate of non-response is noticeable among responders.

On the other hand, the weaknesses of personal interviews are responders’ reluctance for personal reasons for instance, lack of opinion of certain responders about the topic, different interpretation of the questions etc... Besides, there is also a risk of interviewer bias (Scott, 1961; Boyd & Westfall, 1970 (Cited in Ghauri & Grønhaug, 2005); Emory & R, 1991).

The data collections method we chose for our thesis is face-to-face survey interviewing in order to collect primary data and find answers to our hypotheses.

### 3.6 Population and Sample

To gather data for their study, researchers have to collect them from a population and more specifically from a sample.

A population is basically defined as “the universe of units from which the sample is to be selected” (Ghauri & Grønhaug, 2005, p147).

To distinguish from, a sample is “the segment of the population that is selected for investigation” (Ghauri & Grønhaug, 2005, p147). Depending upon the type of study, a probability or a non-probability approach is chosen as the method of selection of the sample.

A non-probability sample is the one that “has not been selected using a random selection method” (Ghauri & Grønhaug, 2005, p147), which means that the likelihood to be selected of some units of the population are greater than others.
On the other hand, a probability sample is described as the one that has been picked up randomly so that each unit in the population has an equal chance to be selected (Ghauri & Grønhaug, 2005).

Bryan and Bell (2003) (Cited in Qayyum & Do 2007, p.18)

“argued that absolute and relative size of sample is the most basic consideration for validity point of view and to generalize the results. However large sample cannot guarantee precision, so that it is probable to better say that increasing the size of a sample increases the likely precision of a sample.”

For this survey, a sample of the population was selected from a probability sampling approach. Around 110 young people ranging from 18 to 30 years old were selected for a face-to-face interview.

The main motive to choose this age group was influenced by the high tendency of impulse buying showed by customers under the age of 35. The younger are said to show more impulsiveness than older people who are likely to be calmer and control their urges to make spontaneous purchases (Bellenger, Robertson & Hirschman, 1978; Rawlings, Boldero & Wiseman, 1995) (Cited in Ghani & Ali Jan, 2010). As our study aims to study the effects of visual merchandising on customers’ buying behavior, we chose this age group which is regarded as the most impulse related age group (Ibid). The implementation of the survey was the same in both stores.

Besides the age determinant, customers having purchased in large quantities with recognizable attributes such as carrying heavy bags, pushing shopping cart,... outside stores right after the shopping process. Selected customers were asked to take part in our survey.

The questionnaires were filled in approximately 15 minutes and support was provided for the good understanding of the different questions. Half were interviewed at ICA Maxi Högskolan. The rest of the data were collected from the other half at Willys Halmstad Öster.
4 EMPIRICAL DATA

This chapter presents a detailed description of the empirical data following the data collection process. The data were processed using the Statistical Packages for Social Sciences’ (SPSS) software for analysis. Statistical method used included descriptive statistics, Pearson correlation and regression analysis.

4.1 Descriptive statistics for demographics

<table>
<thead>
<tr>
<th>Question</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>58</td>
<td>52.7</td>
</tr>
<tr>
<td>Female</td>
<td>52</td>
<td>47.3</td>
</tr>
<tr>
<td>Profession</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student</td>
<td>104</td>
<td>94.5</td>
</tr>
<tr>
<td>Current Worker</td>
<td>6</td>
<td>5.5</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average : 22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-19</td>
<td>4</td>
<td>3.6</td>
</tr>
<tr>
<td>20-21</td>
<td>33</td>
<td>30</td>
</tr>
<tr>
<td>22-23</td>
<td>49</td>
<td>44.6</td>
</tr>
<tr>
<td>24-25</td>
<td>18</td>
<td>16.4</td>
</tr>
<tr>
<td>26-27</td>
<td>4</td>
<td>3.6</td>
</tr>
<tr>
<td>28-30</td>
<td>2</td>
<td>1.8</td>
</tr>
<tr>
<td>Grocery spending (per month)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average : 1860 sek</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;1000 sek</td>
<td>20</td>
<td>18.2</td>
</tr>
<tr>
<td>1001-2000 sek</td>
<td>60</td>
<td>54.5</td>
</tr>
<tr>
<td>2001-3000 sek</td>
<td>28</td>
<td>25.5</td>
</tr>
<tr>
<td>&gt;3000 sek</td>
<td>2</td>
<td>1.8</td>
</tr>
</tbody>
</table>

Table 3: Demographics

Our sample is made up of 110 young people, ranging from 18 to 30 years old. The respondents were chosen among customers from Willys Halmstad Öster and ICA Maxi Högskolan.
Gender

The sample is constituted of 52.7% of male and 47.3% of female respondents. The gender uniformity has been taken into account in order not to affect the result in a negative way, favoring one gender over the other.

Profession

The majority of the respondents were, as expected, students with 94.5%. The current workers represented only 5.5%.

Age

Most respondents were aged between 22 and 23 years old (44.6%), followed by the age group 20-21 (30%) and 24-25 (16.4%). The age average of the respondents was 22 years old.

Grocery spending

The average grocery spending per month of our sample was 1860 SEK. More than half of young people spent on average between 1001 and 2000 SEK (54.5%) and about 27% allocated more than 2000 SEK for their monthly grocery shopping.

4.2 Descriptive statistics for variables

4.2.1 Impulse buying tendency

As a five-point Likert-type scale, which ranged from strongly disagree=1 to strongly agree=5, were used to measure impulse buying tendency, a score above 3 from respondents is considered as a sign of customers buying impulsiveness. Therefore, the mean of 2.84 along with a standard deviation of 0.602 (See Table 4 below) may allow us to conclude that our sample has a tendency of impulse buying to a certain extent.

The statements that describe best customers’ impulse buying behavior are respectively, “I buy things according to how I feel at the moment”, “Sometimes I feel like buying things on the spur of the moment”, “I often buy things spontaneously”, “Sometimes I am a bit reckless about what I buy”.
## Descriptive Statistics

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impulse Buying</td>
<td>110</td>
<td>2.84</td>
<td>0.602</td>
</tr>
<tr>
<td>I often buy things spontaneously</td>
<td>110</td>
<td>3.29</td>
<td>0.912</td>
</tr>
<tr>
<td>&quot;Just do it&quot; describes the way I buy</td>
<td>110</td>
<td>2.71</td>
<td>0.892</td>
</tr>
<tr>
<td>I often buy things without thinking</td>
<td>110</td>
<td>2.18</td>
<td>1.068</td>
</tr>
<tr>
<td>&quot;I see it, I buy it&quot; describes me</td>
<td>110</td>
<td>2.49</td>
<td>1.131</td>
</tr>
<tr>
<td>&quot;Buy now, think about it later&quot;</td>
<td>110</td>
<td>2.38</td>
<td>1.173</td>
</tr>
<tr>
<td>Sometimes I feel like buying things on the spur of the moment</td>
<td>110</td>
<td>3.36</td>
<td>0.926</td>
</tr>
<tr>
<td>I buy things according to how I feel at the moment</td>
<td>110</td>
<td>3.42</td>
<td>1.112</td>
</tr>
<tr>
<td>I carefully plan most of my purchases</td>
<td>110</td>
<td>2.64</td>
<td>1.090</td>
</tr>
<tr>
<td>Sometimes I am a bit reckless about what I buy</td>
<td>110</td>
<td>3.07</td>
<td>1.011</td>
</tr>
</tbody>
</table>

Table 4: Impulse Buying Tendency

<table>
<thead>
<tr>
<th>Gender</th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>2.77</td>
<td>58</td>
<td>0.558</td>
</tr>
<tr>
<td>Female</td>
<td>2.91</td>
<td>52</td>
<td>0.645</td>
</tr>
<tr>
<td>Total</td>
<td>2.84</td>
<td>110</td>
<td>0.602</td>
</tr>
</tbody>
</table>

Table 5: Impulse Buying Tendency by gender
According to table 5, the female gender’s mean score, which is 2.91, may suggest that they are more likely to purchase on impulse in contrast to the opposite gender who only average 2.77.

<table>
<thead>
<tr>
<th>Age</th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>19</td>
<td>2.81</td>
<td>4</td>
<td>.306</td>
</tr>
<tr>
<td>20</td>
<td>3.28</td>
<td>12</td>
<td>.456</td>
</tr>
<tr>
<td>21</td>
<td>2.68</td>
<td>21</td>
<td>.751</td>
</tr>
<tr>
<td>22</td>
<td>2.82</td>
<td>31</td>
<td>.644</td>
</tr>
<tr>
<td>23</td>
<td>2.94</td>
<td>18</td>
<td>.516</td>
</tr>
<tr>
<td>24</td>
<td>2.76</td>
<td>13</td>
<td>.484</td>
</tr>
<tr>
<td>25</td>
<td>2.51</td>
<td>5</td>
<td>.374</td>
</tr>
<tr>
<td>26</td>
<td>2.89</td>
<td>4</td>
<td>.642</td>
</tr>
<tr>
<td>28</td>
<td>2.56</td>
<td>2</td>
<td>.471</td>
</tr>
<tr>
<td>Total</td>
<td>2.84</td>
<td>110</td>
<td>.602</td>
</tr>
</tbody>
</table>

Table 6: Impulse Buying Tendency by age

The table above enables us to state that the ages at which young people are the most likely to show impulsiveness are respectively 20 (mean = 3.28), 23 (mean=2.94) and 26 (mean= 2.89) in relation to the average score on the impulse buying scale.

As we can see in table 7 (see table below), the data don’t provide sufficient information to draw the conclusion that the more young people spend, the more impulse they might be. However, the impulse buying tendency seems to be higher as the grocery spending exceeds 1500 SEK.
<table>
<thead>
<tr>
<th>Grocery spending per month</th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>750</td>
<td>3.44</td>
<td>1</td>
<td>.</td>
</tr>
<tr>
<td>800</td>
<td>2.48</td>
<td>3</td>
<td>.064</td>
</tr>
<tr>
<td>900</td>
<td>3.00</td>
<td>1</td>
<td>.</td>
</tr>
<tr>
<td>1000</td>
<td>2.59</td>
<td>15</td>
<td>.487</td>
</tr>
<tr>
<td>1200</td>
<td>2.60</td>
<td>5</td>
<td>.548</td>
</tr>
<tr>
<td>1320</td>
<td>2.33</td>
<td>1</td>
<td>.</td>
</tr>
<tr>
<td>1340</td>
<td>2.22</td>
<td>1</td>
<td>.</td>
</tr>
<tr>
<td>1350</td>
<td>2.67</td>
<td>1</td>
<td>.</td>
</tr>
<tr>
<td>1400</td>
<td>4.00</td>
<td>1</td>
<td>.</td>
</tr>
<tr>
<td>1500</td>
<td>2.80</td>
<td>17</td>
<td>.327</td>
</tr>
<tr>
<td>1800</td>
<td>2.89</td>
<td>2</td>
<td>.629</td>
</tr>
<tr>
<td>2000</td>
<td>2.88</td>
<td>32</td>
<td>.656</td>
</tr>
<tr>
<td>2200</td>
<td>4.17</td>
<td>4</td>
<td>.321</td>
</tr>
<tr>
<td>2500</td>
<td>2.60</td>
<td>12</td>
<td>.430</td>
</tr>
<tr>
<td>2750</td>
<td>3.44</td>
<td>1</td>
<td>.</td>
</tr>
<tr>
<td>3000</td>
<td>2.92</td>
<td>11</td>
<td>.456</td>
</tr>
<tr>
<td>3080</td>
<td>4.33</td>
<td>1</td>
<td>.</td>
</tr>
<tr>
<td>3500</td>
<td>2.11</td>
<td>1</td>
<td>.</td>
</tr>
<tr>
<td>Total</td>
<td>2.84</td>
<td>110</td>
<td>.602</td>
</tr>
</tbody>
</table>

Table 7: Impulse Buying Tendency by grocery spending (month)
4.2.2 Visual merchandising techniques

<table>
<thead>
<tr>
<th>Influence of Store Layout</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>110</td>
<td>3.06</td>
<td>0.657</td>
</tr>
<tr>
<td>Influence of Product Display</td>
<td>110</td>
<td>3.07</td>
<td>0.713</td>
</tr>
<tr>
<td>Influence of Product Shelf Position</td>
<td>110</td>
<td>3.13</td>
<td>0.622</td>
</tr>
<tr>
<td>Influence of Promotion Signage</td>
<td>110</td>
<td>3.45</td>
<td>0.894</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>110</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 8: Visual merchandising techniques

Table 8 measures effectiveness of four types of visual merchandising (i.e. store layout, product display, product shelf position, promotion signage) on young people shopping behavior. The mean of each technique is above 3 given the 5 point Likert-type scale, which means that customers seems to be influenced by all those four techniques when they made a buying decision.

Promotion signage has the biggest impact, when making a purchasing decision, with a mean of 3.45. Bivariate correlation among variables and directional relationship between young people’s impulse purchasing behavior and the four techniques will be explained later in Pearson correlation and regression analysis within the next chapter (Chapter 5: Analysis of Empirical data).
<table>
<thead>
<tr>
<th>Grocery Spending per month</th>
<th>Influence of Store Layout</th>
<th>Influence of Product Display</th>
<th>Influence of Product Shelf Position</th>
<th>Influence of Promotion Sign</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>2.96</td>
<td>3.03</td>
<td>2.97</td>
<td>3.46</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>0.660</td>
<td>0.599</td>
<td>0.701</td>
<td>1.014</td>
</tr>
<tr>
<td>Mean</td>
<td>3.00</td>
<td>3.13</td>
<td>3.38</td>
<td>3.10</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>0.283</td>
<td>0.884</td>
<td>1.945</td>
<td>1.556</td>
</tr>
<tr>
<td>Mean</td>
<td>3.01</td>
<td>3.08</td>
<td>3.27</td>
<td>3.36</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>0.664</td>
<td>0.714</td>
<td>0.587</td>
<td>0.878</td>
</tr>
<tr>
<td>Mean</td>
<td>3.70</td>
<td>3.50</td>
<td>3.25</td>
<td>4.20</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>0.808</td>
<td>0.289</td>
<td>0.000</td>
<td>0.231</td>
</tr>
<tr>
<td>Mean</td>
<td>3.17</td>
<td>3.25</td>
<td>3.21</td>
<td>3.67</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>0.577</td>
<td>0.935</td>
<td>0.437</td>
<td>1.059</td>
</tr>
<tr>
<td>Mean</td>
<td>3.60</td>
<td>3.75</td>
<td>3.50</td>
<td>3.40</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>Mean</td>
<td>2.78</td>
<td>3.14</td>
<td>3.20</td>
<td>3.96</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>0.540</td>
<td>0.801</td>
<td>0.368</td>
<td>0.768</td>
</tr>
<tr>
<td>Mean</td>
<td>3.00</td>
<td>3.00</td>
<td>3.00</td>
<td>3.80</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>Mean</td>
<td>1.40</td>
<td>2.00</td>
<td>2.50</td>
<td>2.00</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>Mean</td>
<td>3.06</td>
<td>3.07</td>
<td>3.13</td>
<td>3.45</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>0.657</td>
<td>0.713</td>
<td>0.622</td>
<td>0.894</td>
</tr>
<tr>
<td>Mean</td>
<td>3.50</td>
<td>4.00</td>
<td>4.00</td>
<td>2.20</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
</tr>
</tbody>
</table>

Table 9: Visual merchandising techniques by grocery spending (month)
Table 9 shows the influence of the selected visual merchandising techniques regarding the amount spent on groceries per month. As all the techniques average approximately or more than 3, they imply to influence customers in their purchases no matter the money allocated to groceries.

However, the collected data do not allow us to conclude whether the influence of those techniques increases along with the monetary variable due to limited number of responses on hand for some amounts. Thus, amounts for which only one response has been received have not been taken into account being not statistically significant to be representative.

Despite this limitation, the store layout has the biggest influence on customers having spent 2200 SEK (mean= 3,70), 1000 SEK (mean=3,19), 2500 SEK (mean= 3,17) and the least for the amounts reaching 3000 SEK (mean = 2,78), 1500 SEK (mean= 2,96), 1800 SEK (mean= 3,00).

The product display technique has the biggest impact on customers spending 2200 SEK (mean= 3,50), 2500 SEK (mean= 3,25), 3000 SEK (mean= 3,14) and the least on customer allocating 800 SEK (mean= 2,58), 1200 SEK (mean = 2,65), 1000 and 1500 SEK (mean= 3,03) to their grocery spending.

Moreover, the technique Product Shelf Position influences the most customers spending 2200 SEK (mean = 3,75), 1800 SEK (mean= 3,38), 2000 SEK (mean= 3,27) and the least the ones spending 800 SEK (mean= 2,50), 1200 SEK (mean= 2,80) and 1500 SEK (mean= 2,97).

Promotion signage has the biggest influence on customers 2200 SEK (mean= 4,20), 3000 SEK (mean= 3,67) and 2500 SEK (mean= 3,67).

In sum, we can notice that the selected visual merchandising techniques have the biggest influence on customers spending on average 2200 SEK on groceries per month with regards to the mean of each technique.
The table 10 shows the influence of the different techniques on customers according to the gender variable. At first sight, comparing the means between the two genders obtained through the study, the female gender appears to be more influential than the male gender when exposed to the studied visual merchandising techniques.

The most influencing technique on the male gender is the promotion signage technique (mean= 3,35). This technique has the biggest impact on the female influencing their purchases as well (mean= 3,55).

The male gender tend to be more influenced by product shelf position technique (mean= 3,13) and product displays (mean= 2,93) than the store layout (mean=2,90).

On the contrary, the female gender tend to be more influenced by the store layout (mean= 3,24) and product displays (mean= 3,22) than product shelf position technique when making their purchases.
<table>
<thead>
<tr>
<th>Age</th>
<th>Influence of Store Layout</th>
<th>Influence of Product Display</th>
<th>Influence of Product Shelf Position</th>
<th>Influence of Promotion Signage</th>
</tr>
</thead>
<tbody>
<tr>
<td>19</td>
<td>3.20</td>
<td>3.06</td>
<td>3.06</td>
<td>4.05</td>
</tr>
<tr>
<td></td>
<td>.938</td>
<td>.427</td>
<td>.315</td>
<td>.597</td>
</tr>
<tr>
<td>20</td>
<td>3.33</td>
<td>3.48</td>
<td>3.33</td>
<td>3.67</td>
</tr>
<tr>
<td></td>
<td>.599</td>
<td>.686</td>
<td>.597</td>
<td>.974</td>
</tr>
<tr>
<td>21</td>
<td>2.90</td>
<td>2.95</td>
<td>3.00</td>
<td>3.15</td>
</tr>
<tr>
<td></td>
<td>.779</td>
<td>.875</td>
<td>.666</td>
<td>.951</td>
</tr>
<tr>
<td>22</td>
<td>3.16</td>
<td>3.02</td>
<td>3.06</td>
<td>3.35</td>
</tr>
<tr>
<td></td>
<td>.502</td>
<td>.664</td>
<td>.695</td>
<td>.908</td>
</tr>
<tr>
<td>23</td>
<td>2.92</td>
<td>3.04</td>
<td>3.21</td>
<td>3.42</td>
</tr>
<tr>
<td></td>
<td>.809</td>
<td>.714</td>
<td>.564</td>
<td>.867</td>
</tr>
<tr>
<td>24</td>
<td>3.00</td>
<td>3.10</td>
<td>3.35</td>
<td>3.66</td>
</tr>
<tr>
<td></td>
<td>.535</td>
<td>.696</td>
<td>.617</td>
<td>.888</td>
</tr>
<tr>
<td>25</td>
<td>3.40</td>
<td>2.85</td>
<td>2.90</td>
<td>3.56</td>
</tr>
<tr>
<td></td>
<td>.616</td>
<td>.518</td>
<td>.627</td>
<td>.669</td>
</tr>
<tr>
<td>26</td>
<td>3.00</td>
<td>3.38</td>
<td>3.13</td>
<td>3.95</td>
</tr>
<tr>
<td></td>
<td>.365</td>
<td>.661</td>
<td>.595</td>
<td>.772</td>
</tr>
<tr>
<td>28</td>
<td>2.20</td>
<td>2.63</td>
<td>3.00</td>
<td>3.10</td>
</tr>
<tr>
<td></td>
<td>.000</td>
<td>.884</td>
<td>.000</td>
<td>.990</td>
</tr>
<tr>
<td>Total</td>
<td>3.06</td>
<td>3.07</td>
<td>3.13</td>
<td>3.45</td>
</tr>
</tbody>
</table>

Table 11: Visual merchandising techniques by age

The table above shows us the influence of each visual merchandising technique regarding each age.
Influence of store layout has the biggest impact on young people of 25 (mean = 3.40), 20 (mean = 3.33) and 19 (mean = 3.2) years old respectively. However, it has the least influence on those of 28 years old (mean = 2.2) while making their buying decision.

Product Display has the highest mean (3.48) on 20 years old people, followed by 26 (mean = 3.38) and 24 (mean = 3.10) years old. Like store layout, it has the least influence on those of 28 years old (mean = 2.63).

Product shelf position is almost rate at each age with a mean above 3, which means that young people take this factor into account while making their purchasing decision. The only age that shows a mean below 3 is 25 years old (mean = 2.90).

Promotion signage is no doubt the only technique that scores a mean above 3 at each age. It even exhibits the highest mean (4.05) in overall, on people of 19 years old, followed respectively by 26 (mean = 3.95), 20 (mean = 3.67) and 24 (mean = 3.66).

Even though, at this stage we cannot draw the conclusion whether there is a correlated link between ages and the tested techniques, we can see with the information provided by this table that there is no direct relationship between the age and the four techniques. Depending on the age, young people respond differently to the visual merchandising techniques.
<table>
<thead>
<tr>
<th>Correlations</th>
<th>Impulse Buying</th>
<th>Influence of Store Layout</th>
<th>Influence of Product Display</th>
<th>Influence of Product Shelf Position</th>
<th>Influence of Promotion Signage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Correlation</td>
<td>1</td>
<td>,385**</td>
<td>,575**</td>
<td>,485**</td>
<td>,375**</td>
</tr>
<tr>
<td>Sig. (1-tailed)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>110</td>
<td>110</td>
<td>110</td>
<td>110</td>
<td>110</td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>,385**</td>
<td>1</td>
<td>,424**</td>
<td>,465**</td>
<td>,384**</td>
</tr>
<tr>
<td>Sig. (1-tailed)</td>
<td>,000</td>
<td>,000</td>
<td>,000</td>
<td>,000</td>
<td>,000</td>
</tr>
<tr>
<td>N</td>
<td>110</td>
<td>110</td>
<td>110</td>
<td>110</td>
<td>110</td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>,575**</td>
<td>,424**</td>
<td>1</td>
<td>,502**</td>
<td>,513**</td>
</tr>
<tr>
<td>Sig. (1-tailed)</td>
<td>,000</td>
<td>,000</td>
<td>,000</td>
<td>,000</td>
<td>,000</td>
</tr>
<tr>
<td>N</td>
<td>110</td>
<td>110</td>
<td>110</td>
<td>110</td>
<td>110</td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>,485**</td>
<td>,465**</td>
<td>,502**</td>
<td>1</td>
<td>,536**</td>
</tr>
<tr>
<td>Sig. (1-tailed)</td>
<td>,000</td>
<td>,000</td>
<td>,000</td>
<td>,000</td>
<td>,000</td>
</tr>
<tr>
<td>N</td>
<td>110</td>
<td>110</td>
<td>110</td>
<td>110</td>
<td>110</td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>,375**</td>
<td>,384**</td>
<td>,513**</td>
<td>,536**</td>
<td>1</td>
</tr>
<tr>
<td>Sig. (1-tailed)</td>
<td>,000</td>
<td>,000</td>
<td>,000</td>
<td>,000</td>
<td>,000</td>
</tr>
<tr>
<td>N</td>
<td>110</td>
<td>110</td>
<td>110</td>
<td>110</td>
<td>110</td>
</tr>
</tbody>
</table>
Table 12 summarizes correlations between the dependent variable (i.e. Impulse Buying) and the independent variables (i.e. Influence of Store Layout, Influence of Product Display, Influence of Product Shelf Position and Influence of Promotion Signage).

Pearson correlation test was conducted among the variables in order to see whether the selected visual merchandising techniques were correlated with customers’ impulse buying tendency.

The different techniques were found statistically correlated with the dependent variable, impulse buying behavior with a p-value smaller than alpha level 0,01. Indeed, each technique has a significance value of 0,000 (see “Sig. (1-tailed)” in table 12), which is less than 0,01. This also means that the null hypothesis is rejected. As a result, it implies that we can say with 99,99% of confidence that each technique is strongly correlated with customer impulse buying tendency.

Moreover, all significant correlations were positive, implying that an increase in value in one independent variable will result in an increase in value in the dependent variable as well.

We can notice that the strongest correlation was the impulse buying behavior was with the product display technique with a correlation of 0,575. The second strongest correlation was with product shelf position technique with a correlation of 0,485, followed by store layout (correlation= 0,385) and promotion signage (correlation= 0,375).
Table 13: Coefficients and p-values from standard multiple regression test.

Table 13 shows the beta coefficients (β) and p-values provided by the standard multiple regression test. As seen on the table, the techniques product display and product shelf position make the largest unique contribution in explaining the dependent variable, i.e. impulse buying behavior with respectively standardized beta coefficients of 0.418 and 0.228 with p-values less than alpha level 0.05.

The p-values of the remaining techniques (store layout and promotion signage) being greater than 0.05, they are not making a significant unique contribution to the prediction of the dependent variable, i.e. there is no significant directional relationship between those techniques and impulse buying behavior.
5 ANALYSIS OF EMPIRICAL DATA

In this chapter, we will analyze the results provided by the empirical data with the help of the frame of reference. Each hypothesis will be analyzed along with the Pearson correlation test and a standard multiple regression analysis.

5.1 Hypothesis 1: Store layout and Impulse buying

H1: Store layout influences and increases the customers' tendency of impulse buying in grocery stores.

Hypothesis 1 aimed to discover whether there was a significant relationship, correlation between customers’ impulse buying behavior and the layout of the studied store and if this visual merchandising technique enhanced this behavior.

According to the Pearson correlation test (Table 14), a significant correlation (r=0.385) was found between impulse buying and store layout technique with a p-value of 0.000 (“Significance (p)” in table 14), which is less than 0.01, i.e. the null hypothesis is rejected. In other words, given a p-value smaller than alpha-level 0.01, the data allowed us to say with 99.99% of confidence that store layout was significantly associated with young people impulse buying tendency, supporting our hypothesis.

This finding supports Park et al.’ (1999) assertion that store layout exerts major influences on unplanned and impulse buying. He states that the difficulties of customers finding desired products are likely to result in unplanned purchases. Moreover, this finding reinforces the idea that store layout is an important stimulant of unplanned purchase (Iyer, 1998). Hence, a significant correlation has been found between the store layout and impulse buying behavior.

However, the p-value from the standard regression analysis (p=0.258) was greater than alpha level 0.05, the null hypothesis is accepted. This suggests that there is no significant directional relationship between the dependent variable (impulse buying) and the store layout even though a significant correlation was
found between impulse buying behavior and store layout. The data didn’t provide sufficient evidence supporting the relationship between those two variables and didn’t permit to predict the dependent variable. Therefore this stated hypothesis hasn’t been supported.

5.2 Hypothesis 2: In-store product displays and Impulse buying

**H2:** In-store product displays influence and increase the customers’ tendency of impulse buying in grocery stores.

Hypothesis 2 planned to find out whether there was a significant relationship, correlation between customers’ impulse buying behavior and the product displays in stores and if this visual merchandising technique enhanced this behavior.

As showed in Table 14, there is a significant correlation of 0.575 between impulse buying behavior and product display with a p-value of 0.000 ("Significance (p)" in table 14), which is less than 0.01, i.e. the null hypothesis is rejected. In other words, given a p-value smaller than alpha-level 0.01, we can claim with 99.99% of confidence that product display is significantly correlated with impulse buying tendency.

Moreover, the standard regression analysis showed that product display significantly influenced young people impulse buying behavior. The p-value (p<0.001) being smaller than the level of alpha 0.05, the data provided sufficient evidence that there was a significant relationship between impulse buying behavior and product display. There is a directional relationship between the two analyzed variables. Product displays make unique contributions in the prediction of the dependent variable, young customers’ impulse buying behavior. Therefore the hypothesis has been supported with those findings.

This finding supports our hypothesis and confirms Abraham and Goodey (1990), Stern (1962) and Davies and Tilley (2004) statements regarding product displays as a determinant and one of the most influential factors of unplanned purchase. Besides, it strengthens the tendency of retailers to increase the magnitude
of impulse and unplanned purchases in stores through product and store displays and product mixtures (Hoyer and MacInnis, 1997; Jones et al., 2003; Gutierrez, 2004; Michon et al., 2005; Schiffman and Kanuk, 2007; Lee and Kacen, 2008; Tendai and Crispen, 2009).

Furthermore, these findings enable us to confirm the assertion made by Davies and Tilley (2004) that shoppers make most of their purchases based on visual influences. Customers are highly influenced by visual aspects and in this case visually appealing product displays sending stimuli and enticing them to make unplanned purchase impulsively.

5.3 **Hypothesis 3: Product shelf presentation and Impulse buying**

**H3:** *Product shelf presentation influences and increases the customers’ tendency of impulse buying in grocery stores.*

Hypothesis 3 intended to find out whether there was a significant relationship, correlation between customers’ impulse buying behavior and the way products are placed on the stores’ shelves and if this visual merchandising technique enhanced this behavior.

According to Pearson correlation test, a positive significant correlation (r=0.485) was found between customers’ impulse buying behavior and product shelf position with a p-value of 0.000 (“Significance (p)” in table 14), which is less than 0.01, i.e. the null hypothesis is rejected. In other words, given a p-value smaller than alpha level 0.01, the relationship can be considered as statistically significant with 99.99% of confidence.

In addition, the regression analysis exhibits that product shelf position influenced significantly young people’s impulse buying behavior, suggesting that there is directional relationship with a p-value (p=0.023) smaller than alpha level 0.05, supporting the hypothesis. The data provided sufficient evidence that there was a significant relationship between customers’ impulse buying behavior and the
product shelf position technique, supporting our hypothesis. Therefore, the hypothesis has been supported thanks the findings.

Hypothesis 3 supports the role of product shelf position in the literature review as an important factor influencing sales and shopper’s buying behavior (Dreze, Hoch & Purk, 1994). Customers are influenced by the shelf position of the products especially the eye-level. As stated by many authors in the literature (S.Ong, 2002; Brand, 1963; Rook, 1987; Drèze, Hoch and Purk, 1994), product placed at customers’ eye-level can trigger impulse buying and catch attention being more noticeable. This technique is also heavily used by supermarkets which understands the effects of it on customers placing usually best-selling articles where customers can find them with more ease i.e. eye-level.

5.4 Hypothesis 4: Promotional signage and Impulse buying

\textit{H4: Promotional signage influences and increases the customers’ tendency of impulse buying in grocery stores.}

Hypothesis 4 had as purpose to discover whether there was a significant relationship, correlation between customers’ impulse buying behavior and the promotional signage displayed in stores and if this visual merchandising technique enhanced this behavior.

Table 14 indicates a significant Pearson correlation between promotion signage and impulse buying tendency \((r=0.375)\) with a \(p\)-value of 0.000 (“Significance (p)” in table 14), which is smaller than alpha level 0.01. i.e. the null hypothesis is rejected. In other words, given a \(p\)-value smaller than alpha-level 0.01, we can state with 99.99% of confidence that promotional signage is significantly correlated with impulse buying tendency.

Even though a significant correlation was found between those two variables, the standard regression analysis exposed a negative beta coefficient (-0.001) for this independent variable. Moreover, the \(p\)-value from the regression analysis \((p= 0.995)\) being greater than alpha level 0.05, the null hypothesis was accepted.
There is no directional relationship between this independent variable and impulse buying behavior, i.e. promotion signage doesn't contribute to the prediction of the impulse buying variable. The data didn't provide efficient evidence supporting the idea that there was a significant relationship between those two variables, the dependent and the independent variable although impulse buying behavior and promotion signage are correlated. Therefore, this hypothesis is not supported by the data collected.

This result mismatches with the literature review because this technique is stated as a stimuli that mostly impulse purchase (Bell et al., 2011; Stern, 1962; Thaler, 1985; 1999; Tendai and Crispen, 2009) and challenges the assertion that in-store advertisements have an impact on increasing the number of impulse buying (McClure and West, 1969; Woodside and Waddle, 1975; Wilkinson et al.,1982; Inman et al., 1990) (Cited in Asim & Saf, 2011). This particular technique has been identified as determinant influencing impulse buying and having direct effects on consumers’ buying decisions (Stern, 1962; Thaler, 1985; Tendai and Crispen, 2009) (Cited in Asim & Saf, 2011). Promotion signage does not influence customers’ impulse buying tendency according to the data collected through this research.
### Table 14: Correlation with Impulse Buying

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficient</th>
<th>Significance (p)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Influence of Store Layout</td>
<td>0.385**</td>
<td>0.000**</td>
</tr>
<tr>
<td>Influence of Product Display</td>
<td>0.575**</td>
<td>0.000**</td>
</tr>
<tr>
<td>Influence of Product Shelf Position</td>
<td>0.485**</td>
<td>0.000**</td>
</tr>
<tr>
<td>Influence of Promotion Signage</td>
<td>0.375**</td>
<td>0.000**</td>
</tr>
</tbody>
</table>

**. Correlation is significant at p<0.01

### Table 15: Standardized coefficients and p-values from standard multiple regression test

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficient (β)</th>
<th>Significance (p)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Influence of Store Layout</td>
<td>0.102</td>
<td>0.258</td>
</tr>
<tr>
<td>Influence of Product Display</td>
<td>0.418</td>
<td>0.000**</td>
</tr>
<tr>
<td>Influence of Product Shelf Position</td>
<td>0.228</td>
<td>0.023**</td>
</tr>
<tr>
<td>Influence of Promotion Signage</td>
<td>-0.001</td>
<td>0.995</td>
</tr>
</tbody>
</table>

**. Relationship is significant at p<0.05
6 CONCLUSION

In this last chapter, the general findings and results of the thesis are exposed, along with implications and suggestions for further researches. The thesis is summed up answering the research hypotheses and purpose and the limitations of the research are stated.

6.1 Conclusion

After successively collected and analysed the data, we are finally able to draw a conclusion about the relationship between the studied visual merchandising techniques and young customers’ impulse buying behaviour.

Initially, the purpose of this thesis was to analyze the effectiveness of selected visual merchandising techniques on consumers’ impulse buying behaviour and to investigate the relationships between those two variables enabling us to predict customers’ impulse buying behaviour through the studied techniques.

Thereby, in order to study the relationships, four hypotheses have been stated shaping the overall scheme of the thesis after reviewing the existing literature:

**H1**: *Store layout influences and increases the customers’ tendency of impulse buying in grocery stores.*

**H2**: *In-store product displays influence and increase the customers' tendency of impulse buying in grocery stores.*

**H3**: *Promotional signage influences and increases the customers' tendency of impulse buying in grocery stores.*

**H4**: *Product shelf presentation influences and increases the customers' tendency of impulse buying in grocery stores.*

The analysis of the data collected among 110 young customers enabled us to answer the hypothesis using the Pearson correlation and the standard multiple regression tests with the software SPSS. One major finding is that visual
merchandising influences young customers’ impulse buying behavior. The selected visual merchandising techniques have each been found significantly correlated to young customers’ impulse buying tendency. The data provided sufficient evidence regarding significant relationships between impulse buying and in-store product displays and product shelf position.

Even though significant relationships haven’t been found between customers’ impulse buying tendency and store layout and promotion signage, the results proved that these variables are significantly correlated to impulse buying.

The result of the study states that there is a directional relationship between young customers’ impulse buying behaviors and two visual merchandising techniques: in-store product display and product shelf position. The findings imply that young consumers tend to make purchases on impulse when exposed to the stimuli from the two techniques. Therefore these techniques can contribute to predict impulse buying. Those two findings are in accordance with the literature review described in chapter 2 (S.Ong, 2002; Brand, 1963; Rook, 1987; Drèze, Hoch and Purk, 1994; Hoyer and MacInnis, 1997; Jones et al., 2003; Gutierrez, 2004; Michon et al., 2005; Schiffman and Kanuk, 2007; Lee and Kacen, 2008; Tendai and Crispen, 2009; Davies and Tilley, 2004; Abraham and Goodey, 1990, Stern, 1962).

This suggests that these visual merchandising techniques i.e. in-store product displays and product shelf position serve as external motivator influencing and motivating customers creating a desire to make unplanned purchases.

However, the results from the data analysis showed surprisingly no relationship between promotion signage and customers’ impulse buying behavior. Although researchers and authors (Bell et al., 2011; Stern, 1962; Thaler, 1985; 1999; Tendai and Crispen, 2009) agreed on the influence of promotion signage on impulse buying tendency, the data collected among young Swedish customers didn’t provide sufficient evidence confirming this assertion. The reason of this mismatch might be that our segment was less price-sensitive and hence, less attracted and influenced by in-store advertisements, price reductions and so forth.
Furthermore, the research’s segment might have affected the results to a certain extent. The analysis is based on data collected from 110 respondents, young customers ranging from 18 to 30, shopping in supermarkets Willys Halmstad Öster and ICA Maxi Högskolan in Halmstad. A higher number of respondents, a different target segment or a different geographical area might have resulted in different findings and conclusions. This thesis includes the following limitations:

- Respondents were young customers ranging from 18 to 30 years old
- The study has been carried out in front of supermarkets Willys Halmstad Öster and ICA Maxi Högskolan.
- Only 110 valid questionnaires have been collected
- The study area has been limited to Halmstad.
- Among the different visual merchandising techniques stated in the frame of reference, only four have been studied through the thesis: store layout, in-store product displays, product shelf position and promotion signage.

Finally, this study showed and described the utility of visual merchandising in understanding impulse buying.

### 6.2 Implications

In their attempts to enhance their store atmosphere, retailers are required to develop and implement strategies and action plans regarding their retail setting to attract customers and sell them merchandise (Hartman & Spiro, 1995; Bastow-Shop et al., 1991).

Providing efficient visual communication through interior and exterior presentation is major concern and factor in the success of a retail store (Edwards & Shackley, 1992) (Cited in Kerfoot et al., 2003).

Retailers can attempt to create desire for their products, entice in-store browsing and lead to unplanned and impulse purchases through stimuli sent by visual merchandising.

Visual merchandising influences impulse buying behaviour creating desire for products and leading to purchases.
Implementation of visual merchandising techniques is an important strategic decision retailers have to face in order to reach their goals and be the most effective possible.

This study gives insights to retailers about which visual merchandising techniques that influence consumers’ impulse buying. This study provided information about the influence of visual merchandising on impulse buying. According to our findings, among the four studied visual merchandising techniques, in-store product display and product shelf position have been found to significantly influence young customers’ impulse buying behaviour.

Therefore, retailers should increase usage and emphasize on these two techniques, building visually appealing product displays and focusing on the shelf position of the products in order to entice customers to make unplanned purchases.

Store layout and promotion signage were not found to significantly influence impulse buying tendency. However, correlation was found between impulse buying behaviour and store layout and promotion signage.

Even though promotion signage and store layout did not seem to influence customers’ impulse buying behaviour, authors and researchers pointed out influences that those techniques might have on customers’ impulse buying behaviour (Bell et al., 2011; Stern, 1962; Thaler, 1985; 1999; Tendai and Crispen, 2009; Park et al., 1999; Iyer, 1998).

As a result, retailers should not neglect these techniques in their marketing and retailing planning as well as other techniques not studied in this thesis.

6.3 Further studies

As impulse buying is a universal behaviour observed regardless demographical or geographical constraints, researches with other demographical and geographical groups may enable a deeper understanding of the phenomenon and the influences of visual merchandising upon impulse buying behaviour.
Moreover, this study being limited to only four techniques, researching the influences of other existing visual merchandising techniques as well as other internal and external impulse buying motivators can constitute interesting subjects to deepen the phenomenon of impulse buying.

A qualitative approach to this particular research as well as a combination of qualitative and quantitative methods can be recommended for future researches. Our thesis’ aim being to quantify the effects of visual merchandising upon impulse buying behaviour, studies regarding internal responses of customers exposed to these techniques and retailers and/or marketers point of views can be considered for future researches.
REFERENCES


Attention and Evaluation at the Point of Purchase. *Journal of Marketing*, 73, 1-17.


APPENDIX 1

Questionnaire: Effects of VM on consumer impulse buying behavior

Did you buy any item impulsively i.e items that you didn’t plan to buy before entering the store but you end up buying it?  Yes or No

If so, what did you buy? ..........................................

<table>
<thead>
<tr>
<th>Section A</th>
<th>Measurement of impulse buying</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strongly disagree</td>
</tr>
<tr>
<td>1</td>
<td>I often buy things spontaneously.</td>
</tr>
<tr>
<td>2</td>
<td>&quot;Just do it&quot; describes the way I buy things.</td>
</tr>
<tr>
<td>3</td>
<td>I often buy things without thinking.</td>
</tr>
<tr>
<td>4</td>
<td>&quot;I see it, I buy it&quot; describes me.</td>
</tr>
<tr>
<td>5</td>
<td>&quot;Buy now, think about it later&quot; describes me.</td>
</tr>
<tr>
<td>6</td>
<td>Sometimes I feel like buying things on the spur of the moment.</td>
</tr>
<tr>
<td>7</td>
<td>I buy things according to how I feel at the moment.</td>
</tr>
<tr>
<td>8</td>
<td>I carefully plan most of my purchases.</td>
</tr>
<tr>
<td>9</td>
<td>Sometimes I am a bit reckless about what I buy.</td>
</tr>
</tbody>
</table>
### Section B

#### Influence of Store Layout

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Undecided</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

10. I tend to purchase unintended products while trying to find a specific product.

11. I tend to buy product while walking towards to back walls or sidewalls of stores where meat section and/or dairy product are placed.

12. When I enter a store I tend to walk directly towards the products I have planned to buy (opposite).

13. When I enter a store I tend to head toward the fresh fruit, vegetables section.

14. When I enter a store I tend to follow the store layout while browsing the store.
### Section C  
**Influence of Product Display**

<table>
<thead>
<tr>
<th></th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Undecided</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>15.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

15. I tend to be attracted to product displays when shopping through the store.

16. While browsing the store I tend to purchase products displayed in eye-catching displays.

17. While browsing the store I tend to walk towards and buy products displayed in visually attractive displays.

18. I tend to buy products displayed at or near the checkout desks.

### Section D  
**Influence of Product Shelf Position**

<table>
<thead>
<tr>
<th></th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Undecided</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>19.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

19. I tend to buy unintended products while I’m browsing the aisles of a store.

20. I tend to look at products located in eye-level.

21. I tend to stop and browse products displayed on shelves.
22. I tend to buy products displayed on shelves on sight.

Section E  
**Influence of Promotion Signage**

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Undecided</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

23. I tend to purchase products from special offers communicated by in-store advertising and promotion signage.

24. I am more likely to buy an unintended product that is on sale.

25. I tend to stop and browse products with promotional offers.

26. Promotional signage entice me to browse products.

27. Price reductions, discounts, special offers are likely to influence my purchases.

Section F  
**Demographic questions**
<table>
<thead>
<tr>
<th></th>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>28.</td>
<td>What is your gender? Male or Female</td>
</tr>
<tr>
<td>29.</td>
<td>How old are you?</td>
</tr>
<tr>
<td>30.</td>
<td>Are you a student, unemployed or current worker?</td>
</tr>
<tr>
<td>31.</td>
<td>How much do you spend on grocery shopping on average every month?</td>
</tr>
</tbody>
</table>