# MEASURING THE EFFECT OF CONSUMER CONFUSION ON BRAND IMAGE AND BRAND LOVE WITH DISTRUST AS A MEDIATOR: A study of high product involvement situation

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Thesis submitted to the Lahore School of Economics as a fulfillment of the requirement for the degree of MPhil in Business Administration Research (2018)

# **Declaration**

I declare that this thesis was composed by myself, that the work contained herein is my own except where explicitly stated otherwise in the text, and that this work has not been submitted for any other degree or professional qualification.

## Acknowledgements

This thesis is a product of my immense hard work and ample supervision by my supervisor Dr. Sohail Zafar. I thank Allah Almighty for giving me the strength to endure this period of continuous hard work, and getting done with this thesis successfully. I am very thankful to Dr. Sohail for his constant supervision and careful inspection of every single part of my thesis to make it as perfect as possible. He has been the most approachable and amiable person throughout the course of working on this thesis. I am also thankful to my friend and colleague, Sana Khan who constantly supplied me with all the reading material I needed in the course of working on my thesis. Lastly, I thank my parents for their support, and for giving me the liberty to make my life's decisions, and devote as much of my time, and effort to get done with this thesis.

#### **Abstract**

**Purpose:** When consumers get confused due to brand proliferation, information overload and product complexity while shopping, this situation results in purchase postponement, abandoning of purchase, mistaken purchases, physical harm from using the wrong product, post purchase regret of buying the wrong product, dissatisfaction, and anger. Few studies in literature of consumer confusion have studied negative effects of confusion on consumer brand relationship. This thesis aims to explore the effect of consumer confusion on brand love and brand image with distrust as a mediator variable.

**Research Questions:** This thesis investigated whether or not consumers' love for brand, and brand image of loved brand is affected by confusion they face while shopping for a product in which they are highly involved. This thesis also hypothesizes consumer distrust as a mediator variable between consumer confusion and dependent variables; brand love and brand image in a high product involvement situation.

Method & Analysis: To answer its proposed research questions this thesis utilized quantitative research strategy, and positivistic research approach was adopted. Pen and paper survey method was utilized to collect data. Sample population of this thesis is postgraduate and undergraduate students. This thesis collected data for mobile phones which falls in the category of products that are usually bought with high level of involvement The collected data was analyzed using confirmatory factor analysis (CFA) to analyze measurement model, and path analysis was conducted to analyze structural model via application of structural equation modeling (SEM) technique in AMOS software. Mediation analysis was carried out by using the approach developed Zhao, Lynch, & Chen (2010). A total of 350 questionnaires were administered to a convenient sample of postgraduate and undergraduate students of Lahore School of Economics, Pakistan and 291 usable questionnaires were put into the analysis which made the response rate of 83%.

**Results:** Results of CFA confirmed the reliability and validity of the constructs. SEM analysis shows that confusion has an indirect negative effect on brand image and brand love through distrust and has no direct significant effect on the brand image and brand love. Therefore, according to the mediation approach developed by Zhao, Lynch & Chen (2010) when only indirect effect (a x b) is significant there exists an "only indirect mediation" which suggests that the proposed mediator fully mediates the relationship between independent and dependent variable. Afterwards, the significance of indirect effect (a x b) was tested by the application of percentile bootstrap analysis using the syntax developed by Preacher & Hayes (2004) in SPSS software. The results of bootstrap test yielded significant indirect effect (a x b) of confusion on brand image and on brand love through distrust. The results of this thesis conclude that distrust acts as a mediator variable, and fully mediates the relationship between consumer confusion and brand love, and also between the consumer confusion and brand image.

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#### 1. Introduction

## "So quick bright things come to confusion" William Shakespeare

Advancement of technology and globalization have provided marketers with numerous channels to reach the target consumers all around the globe. Marketers are now able to cater the needs of millions of consumers around the globe. As a consequence of the globalization consumers' choice set is widening with everlasting offers from local and global manufacturers within the same product class (Tang, Hsieh, & Chiu, 2017). Marketers have always liked the idea of "more choice" therefore, providing consumers with too many product offerings to choose from (Iyengar & Lepper, 2000; Iyengar, Wells, & Schwartz, 2006). Iyengar & Lepper's (2000) conducted three experiments to test the assumption "the more choice, the better" and found that more choice did not aid consumers in decision making; and that was a finding contrary to common sense. Iyengar & Lepper's (2000) field and laboratory experiments showed that consumers, when offered with only 6 choices in gourmet jams or chocolates, made more purchase of jams or chocolates and expressed greater satisfaction regarding the selection and decision making in comparison to the situation when they were offered to choose from an array of more than 20 or 30 choices for gourmet jams or chocolates.

The increasing number of similar products serving the same need, many of which resemble each other in labeling and packaging creates confusion, the confusion makes consumers unable to distinguish between the brands they buy regularly, and apparently similar brands offering the same product (Airbag, Arora, Handerson, & Kim, 2014). This situation can lead consumers to make the wrong purchase decision resulting in post-consumption dissatisfaction (Moon, Costello, & Koo, 2017) and non-maximization of utility (Walsh, Mitchell, Kilian, & Miller, 2010). Faced with

of alternatives. At the time of shopping, when none of the alternative products offer any buying advantage consumers are more likely to postpone the purchase. Dhar (1997) conducted 7 experimental studies which showed that when consumers were provided with wider choice set for a single product, they he sitated to buy the product from an array of similar alternative products.

Consumers' limited ability to process a lot of information about so many products in the same product category at a single point in time makes it difficult for them to select one option for final purchase. Langer & Eisend (2007) conducted an empirical study and used an experiment method with 226 participants to test the causal relationship between information overload and confusion in eco-labels market. Langer & Eisend (2007) experimental study shows that high number of eco-labels increases the confusion among consumers. The cognitive inability to deal with information overload makes consumers confuse and confusion results in unwanted outcomes for consumers and marketers as well (Langer & Eisend, 2007).

Many of the previous and recent studies on consumer confusion have identified product proliferation, and more complex products with too many features as the likely sources of confusion (Mitchell & Papavassiliou, 1997; Mitchell & Papavassiliou, 1999). In this era of rapid technological advances and production of highly advanced electronic products consumers are more likely to get confuse while shopping for electronics and electronic gadgets like mobile phones (Turnbull, Leek, & Ying, 2000) and laptops. Turnbull, Leek, & Ying (2000), in order to study confusion in UK mobile phones market, conducted short personal interviews with 167 mobile phone users and found that the complexity of mobile phone market makes consumers confuse while trying to purchase mobile phone.

When consumers get confused due to brand proliferation, information overload and product complexity while shopping, this situation results in purchase postponement, abandoning of purchase, mistaken purchases, physical harm from using the wrong product, post purchase regret of buying the wrong product, dissatisfaction, and anger (Mitchell & Papavassiliou, 1997, 1999; Walsh, Hennig-Thurau, & Mitchell, 2007; Mitchell, Walsh, & Yamin, 2005; Mitchell, Walsh, & Yamin, 2004). Researchers have theorized certain marketing consequences of confusion including increased frequency of product return after purchase, lower sales (Airbag et al., 2014), bad reputation of the manufacturer, damaged brand image and consequently losing more customers to competitors (Kasabov, 2015).

Many marketing researchers have studied the effects of confusion on consumers in many different product categories including; watch market (Mitchell & Papavasilliou, 1997), food market (Kenning, 2008; Wobker, Eberhardt, & Kenning, 2015; Wobker & Kenning, 2012), green products (Chen & Chang, 2013), grocery products (Philips & Shah, 2017) wine market (Drummond & Rule, 2005), mobile phones market (Turnbull, Leek, & Ying, 2000; Leek & Chansawatkit, 2006; Kasper, Bloemer, & Driessen, 2010; Wang & Shukla, 2013), financial services market (Shukla, Banerjee, & Adidam, 2010), health care services (Hasler, 2008; Gebele et al., 2014), supermarket products (Friedman, 1966), mortgage market (Woodward, 2003), eco labels (Moon, Costello, & Koo, 2017; Langer & Eisend, 2007; Brécard 2014) and internet based customizations and online shopping (Matzler & Waiguny, 2005; Huffman & Kahn, 1998; Matzler, Stieger, & Fuller, 2011; Matzler, Waiguny, & Fuller, 2007). The above mentioned empirical studies have reported negative effects of confusion on consumer satisfaction and found the following marketing consequences of confusion; more products are returned after purchase, lower

sales, bad reputation of the manufacturer, damaged brand image and losing more customers to competitors.

According to the relational orientation in marketing consumers build relationship with the brands just like they build relationship with their human counterparts. Consumers fall in love with the brands the buy regularly and tend to incorporate them as a part of their self (Ahuvia, 2005; Fournier, 1998; Belk, 1988; Jamal & Goode, 2001). Consumers' love for brand and their emotional attachment with the brand is the key driver of brand loyalty. The bond of love between consumers and their brands, make the competing brands less appealing to consumers as they hold a distinctive image of the loved brand in their minds (Festcherin, 2014). Trust is the corner-stone of any valuable relationship and also many empirical studies have found trust as key mediator for consumer commitment and long lasting relationship between consumers and their loved brands. Confusion results in decision postponement (Turnbull, Leek, & Ying, 2000), post-purchase regret (Anninou, 2018) and dissatisfaction (Moon, Costello, & Koo, 2018). Confusion makes consumers to doubt about the capacity of their loved brand to serve them. In this sense confusion can make consumers to distrust their loved brand, and may negatively affects consumer-brand relationship.

When brands appear to confuse consumers, a negative perception about the brand is formed in the minds of the consumers. Consumers' negative perception about a brand negatively affects brand image which damages brand equity, hence making the brand dysfunctional (Kocyigit & Ringle, 2011; Alhaddad, 2014). Therefore, confusion has now become a subject of attention for academicians and practitioners as well. This research aims to study the relationship of consumer confusion with brand love and with brand image in the context of high product involvement. This research further purposes to investigate the role of consumer distrust as a mediator.

#### 1.1. Consumer Confusion and High Product Involvement

Product involvement is an important aspect of consumer behavior which determines the buying choice of consumers (Zaichkowsky, 1985). In the discipline of consumer behavior product involvement is defined as "consumer's enduring perceptions of the relevance and importance of the product based on the consumer's inherent needs, values, and interests" (Zaichkowsky, 1985; Engel & Blackwell, 1978).

Product involvement, has been conceptualized as a twofold behavior, low involvement and high involvement behavior of consumers (Blackwell, 1982; Zaichkowsky, 1985). Low involvement behavior is observed while making of mundane purchase decisions of everyday life for which consumers do not require to process a lot of information (Chung & Zhao 2003).

When in a high involvement situation, consumers search for more product benefits and are more concerned with the functionality of product. In high involvement situations consumers process a lot of information about the product and go through sequential stages of decision making process (Celsi & Olson, 1988). For example purchase of a car, mobile phone and laptop. Hence, consumers in high involvement transactions suffer from difficulty in making the final decision, as to which is the best alternative to select.

With the immense availability of look-alike substitute brands within a single product category in the market, consumers may perceive many different brands to be similar and may suffer from brand similarity confusion (Airbag, Arora, Handerson, & Kim, 2014). This situation makes decision making difficult for consumers. This research focuses on consumer confusion while making a decision to purchase a product with high level of involvement. Therefore, this research would take laptop computers as a sample of product which is usually bought with high level of product involvement.

#### 1.1.1. Consumer Confusion and low product involvement

Pioneer brands are more likely than the late entrants exceed in gaining the market share in consumer markets and industrial markets as well (Carpenter & Nakamoto, 1989). Carpenter & Nakamoto (1989) emphasize on the view that the pioneering advantage can arise as an outcome of consumer's preferences formed in the process of learning more and more about a brand. This process of learning is capable of forming consumer preference for the pioneer brand only, which does not give the new entrants a fair chance to snatch the pioneer brand's larger chunk of market share, this was found true even in the case of brand reposition and very low switching cost for consumers. Products similar to the pioneer brand's product which are introduced later in the market appear to confuse consumers (Chryssochoidis, 2000).

Brand name is reported to be one the most important marketing universal, it is viewed as a signal of quality; and its importance is reported to be invariant across cultures (Dawar & Parker, 1994). Hoyer & Brown (1990) define brand awareness as "rudimentary level of brand knowledge involving, at least, recognition of the brand name." Hoyer & Brown (1990), performed an experiment with consumers in a low involvement situation, and found that brand awareness dominated the choice heuristic among consumers for a common, repeat purchase, to economize time and effort. They also found that consumers heavily relied on brand awareness, when face the situation of buying a product for the very first time in the context of low product involvement transaction. Macdonald & Sharp (2000) replicated the study of Hoyer & Brown (1990) and found their results consistent with the findings of the original study. Consumers are less likely to get confused in low product involvement situations (Dhar, 1997). Hence, the past research suggests that, in low product involvement situations consumers tend to rely on the brands they recognize to exist in a product category, and they do so to save themselves from shopping fatigue for common

products such as cereals, jam, butter, tea, milk, soap and shampoo. Therefore, this study specifically focuses consumer confusion in the context of high product involvement.

#### 1.2. Background and Theory of the research

Walsh, Hennig-Thurau, & Mitchell (2007) have developed three dimensional scale for measuring consumer confusion construct. Consumer confusion, as defined in the literature, has three dimensions 1) Similarity confusion: it is the confusion which arises from similar products sold under similar labels, 2) Information overload confusion: it is the confusion which arises from volume and diversity of information generated by numerous brands in the same product category, and 3) Ambiguity confusion: it is the confusion which arises from product complexity, ambiguous information and advertisement (Mitchell & Papavassiliou, 1997; Mitchell & Papavassiliou, 1999; Walsh & Mitchell, 2010; Mitchell, Walsh, & Yamin, 2004; Walsh, Hennig-Thurau, & Mitchell, 2007; Mitchell, Walsh, & Yamin, 2005). Anninou (2018) suggests that confusion is a dynamic process which is mainly caused by factors purely cognitive in nature, and stimuli from environment and physical surroundings. According to the authors, confusion elicit emotions in individuals and motivate them to engage in a variety of behaviors such as anger, regret, decision postponement, and coping behaviors.

Previous body of research about consumer confusion analyzes its antecedents, the consequences attached to it, and its impact on the consumer buying behavior. Past studies have also repeatedly analyzed the relationship of confusion with word of mouth, consumers' satisfaction, decision postponement behavior, trust and brand loyalty (Kasabov, 2015). Also, previous research has enlisted many coping strategies used by consumers to help reducing confusion and prevent consumers from making mistaken purchases. The four categories of various coping strategies adopted by consumers discussed in the literature are: 1) developing goals for

buying a product, 2) searching for ample information, 3) reducing the set of alternative products, and 4) consulting about the purchase decision with friends or experts. (Mitchel & Papavasilliou, 1997; Mitchell & Papavasilliou, 1999; Mitchell, Walsh, & Yamin, 2005).

Most of the previous research on consumer confusion has investigated its relationship with satisfaction and brand loyalty, which are broad concepts in the context of consumption. Research studies in the past have overlooked to study the constructs related to brand, such as elements of brand equity, brand image and brand love with respect to confusion. The purpose of this research is to investigate this overlooked aspect and it seeks to find out the relationship between consumer confusion and brand love; and also the relationship of consumer confusion with brand image in high product involvement situation, and the role of distrust as mediating variable.

This research is drawn from "Theory of Planned Behaviour" (TPB) developed by Ajzen (1991) that provides a comprehensive framework for understanding and predicting humans' behaviors exhibited under the influence of their specific interests. TPB has been widely applied by marketing researchers, and has its roots in psychological reasons for consumers' behavior. TBP identifies consumers' intention, subjective norm and control factors (which are responsible for execution or delay in consumers' behaviour) as determinants of consumers' intention to engage in a behaviour. Literature suggests that confusion makes consumers to engage in certain behaviours such as decision postponement. This research investigates behavioral outcomes of confusion towards their partner brand in an exchange relationship, therefore, application of TBP is appropriate for this research.

#### 1.3. Statement of Problem

This research aims to analyze the effect of consumer confusion on brand image and consumers' love for brand in the context of high product involvement. Also, the mediating role of consumer distrust will be analyzed in this research to see the direct effect and indirect effect of confusion on brand image, and brand love. In a nutshell, this research will explore the role of consumer confusion and mediating role of consumer distrust in affecting brand love and brand image significantly or non-significantly among confused consumers.

#### 1.4. Assumptions of the research

This research assumes that the respondents, who would be participating in the survey, will fill out the questionnaire with honest responses that will reflect their true opinions about the items or questions. Second assumption of this research is that the respondents understand the constructs of research and they would not have any sort difficulty in making sense to the constructs. Lastly this research assumes that the respondents would not give biased responses.

#### 1.5. Scope of the study: Research Questions

This study proposes the following research questions in the context of high product involvement situation;

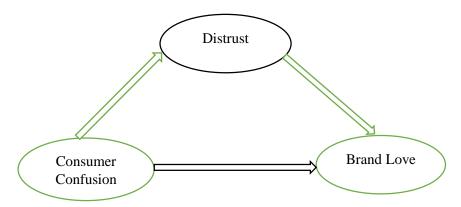
RQ 1. What is the relationship of consumer confusion with brand love?

RQ 2. Is the presence of distrust act as a mediator between consumer confusion and brand love?

Brand Love = $\beta_0 + \beta_1$  Consumer Confusion+ $\beta_2$  Consumer Distrust +  $\epsilon$ 

Brand Love = $\beta_0$ +  $\beta_1$  Consumer Confusion+  $\epsilon$ 

Distrust =  $\beta_0 + \beta_1$  Consumer Confusion +  $\epsilon$ 



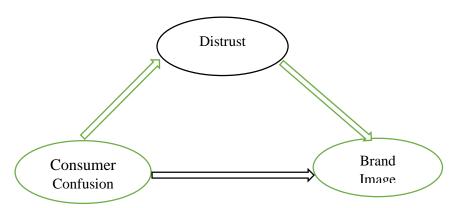
RQ 3. What is the relationship of consumer confusion with brand image?

RQ 4. Is presence of distrust act as a mediator between consumer confusion and brand image?

Brand Image = $\beta_0$ +  $\beta_1$  Consumer Confusion+ $\beta_2$  Consumer Distrust +  $\epsilon$ 

Brand Image = $\beta_0 + \beta_1$  Consumer Confusion+ $\epsilon$ 

Distrust =  $\beta_0 + \beta_1$  Consumer Confusion +  $\epsilon$ 



#### 1.6 Contribution of the current research

This study aims to make following three contributions;

- 1) This research further tests the generalizability of the consumer confusion scale by administering the scale to the consumers in Pakistan.
- 2) This research framework analyzes the effect of consumer confusion on the dependent variables; brand love and brand image which have not received much of the attention of researchers in the study of confusion.
- 3) Few studies in literature of consumer confusion have proposed mediator variable between consumer confusion and dependent variables in the research framework. This research incorporates consumer distrust as a mediator between the consumer confusion, and brand love and brand image.

# 1.7 Conceptual Definitions of Constructs of the Research

Table 1 contains the conceptual definitions of constructs proposed to be studied in this thesis

 Table 1: Conceptual Definitions of Constructs

Sr.#	Construct	Definition	Author
1	Similarity	"Consumer's propensity to think that different	Walsh, Hennig-
	Confusion	products in a product category are visually and functionally similar."	Thurau, &
			Mitchell, 2007
2	Information	"Consumers' difficulty when confronted with	Walsh, Hennig-
	Overload	more product information and alternatives than	Thurau, & Mitchell, 2007
	Confusion	they can process in order to get to know, to	
		compare and to comprehend alternatives."	
3	Ambiguity	"Consumers' tolerance for processing unclear,	Walsh, Hennig
	Confusion	misleading, or ambiguous products, product-	Thurau, &
		related information or advertisements".	Mitchell, 2007
4	Brand Love	"A reciprocal, dynamic, multiplex, and purposive	Keh, Pang, &
		relationship between satisfied consumers and	Peng, 2007
		their brands."	
5	Brand Image	"How a brand is perceived by consumers"	Aaker, 1996
	J		
6	Distrust	"Confident negative expectations regarding	Lewicki,
		another's conduct."	McAllister, & Bies, 1998

#### 2. Literature Review

#### 2.1. Introduction

In the area of marketing; brand loyalty, perceived quality, satisfaction and consumer value are considered as key marketing variables and a great body of research focusing on these key constructs exists in literature. Many researchers have studied consumer confusion and its relationship with key marketing constructs. Marketers realize the importance of studying confusion as it affects the process of consumer decision making, and is critical to the success of various products and their marketing plans. After the emergence of relational orientation in the discipline of marketing, marketers tend to center all the marketing activities on consumers relationships with the brands.

Consumers' love for brand is a concept that take consumers' attachment with the brand beyond brand loyalty and results in strong emotional ties between the consumers and brands. The bond of love between a consumer and a brand, make the competitors' brand less appealing to consumers as they hold a distinctive image of the loved brand in their minds which in turn results in forming very frequent purchase intention. Trust is the corner-stone of any valuable relationship and also many empirical studies have found trust as key mediator for consumer commitment and long lasting relationship between consumers and their loved brands. Confusion results in decision postponement, and post-purchase dissatisfaction. Confused consumers are very much likely to get angry at the time of shopping and they may doubt the capacity of their loved brand to serve them. The state of confusion can hurt the trust of consumers, converting it into distrust; which in turn has negative effects on consumer-brand relationship. This research aims to analyze the relationship between confusion and brand love and brand image. This section of the thesis discusses the

relevant literature, and in the light of the findings reported in the literature, hypotheses of this thesis were formed.

#### 2.2 Consumer Confusion (Independent Variable)

Consumer confusion had been an abstract concept, which lacked definition, during the early stages of academic research. The term confusion became the subject of research when it became central to issue of trademark infringement cases in U.S. during mid-70s. Trademark refers to a brand name, symbol, label or sound which differentiate the manufacturer's product from the competitors in the market. Trademark infringement takes place when a manufacturer marks its product with a name, symbol, label or sound similar to what pioneering company has produced (Loken, Ross, & Hinkle, 1986; Miaoulis & d'Amato, 1978). Immensity of products choices which were not only similar in the commodity and usage but also in packaging and labeling, in the market lead consumers to get confused about the origin of the product.

During late 70s and early 80s there was an abundance of me-too products in U.S. and many consumers started to buy new products which were look alike of pioneer manufacturer's product, believing that the new product shares the origin with the pioneer manufacturer. This situation caused monetary losses to pioneer manufacturers and the pioneer manufacturers started to file lawsuits against other manufacturers producing same product as theirs. In the decade of 90s the number of trademark infringement lawsuits filed in U.S. district courts was 14,000 (Howard, Kerin, & Gengler, 2000). Since trademark infringement became legal issue in U.S., the country created trademark legislation to protect both manufacturers and consumers. Courts used "likelihood of confusion" as a yardstick to judge the infringement cases, and the focus of academic research shifted from trademark infringement to consumer confusion (Howard, Kerin, & Gengler, 2000).

The initial focus of researchers was on product similarity as a major cause of consumer confusion. For a long time the concept of confusion has been associated with abundance of similar products floating in the consumer market. Initially researchers hypothesized that the availability of similar "look-alike" products in market makes consumers confuse about the origin of a product. Friedman (1966) studied the consumer confusion in the supermarket products and treated confusion as a psychological variable. Friedman (1966) proposed that confusion is caused when the truth about the product's content and pricing is hidden by its packaging. Friedman (1966), in order to study confusion caused from similar products in supermarket, conducted a quantitative behavioral study in the local supermarket of Ypsilanti, Michigan, U.S. The study involved 33 married women who were asked to buy 20 most economical products from the display. Friedman (1966) developed three quantitative measures of confusion based on behavioral activities. Those measures used the unit-price information from the participants. All three measure were found to be significantly different from each other; and similar packaging was believed to be a reason for those differences.

The concept of confusion was so abstract that it was measured only via an experiment and consumers ratings against different levels of confusion i.e. low and high. Loken, Ross, & Hinkle (1986) proposed that a causal relationship exists between 'physical similarities of brands' and 'consumer confusion of origin of brand' they used an experimental design to measure confusion. Loken, Ross, & Hinkle (1986) experimental design involved showing consumers slides of many similar products by different producers in the same product class, and then the subjects were instructed to rate the level of similarity existed between the products they had seen in slides, and the level of confusion caused by the similarity.

Other than confusion ratings researchers also utilized another experimental technique involving consumers' response towards pictures or print advertisements of similar products to measure confusion. Psychologists in the area of Learning proposed the "theory of stimulus generalization" for explaining many discriminating processes and concepts similar to confusion. The theory implies that if a stimulus A generates response A in a person, at different time under relevant situation the stimulus A will generate the same response A in that person. Hence, the stimulus A can be generalized for eliciting a certain response over and over again under a certain situation. The stimulus generalization theory was applied by marketers to create advertisements initially (Miaoulis & d'Amato, 1978). After the wide adoption of stimulus generalization theory by the marketers, the marketing researchers used the theory to design methods to measure product similarity and consumer confusion. Miaoulis & d'Amato's (1978) experimental study concluded that confusion is the response in consumers generated by product similarity acting as a stimulus.

Much of the earlier research on confusion investigated causal relationship between confusion and certain factors which may cause confusion. The research on confusion as a concept per se lacked in literature. Mitchell & Papavassiliou (1997) for the first time did qualitative work on confusion and explained many different sources of confusion, other than product or brand similarity, in the watch market. After conducting accompanied interviews with 30 watch shoppers they concluded that confusion is not merely caused by product similarity or some stimulus but is rather a cognitive phenomenon and can arise from multiple factors. Mitchell & Papavassiliou (1999) gave a new direction to the research on confusion and enlisted many causes and sources of confusion which all fall into three main categories 1) confusion from insufficient or overload information, 2) confusion from product complexity and ambiguity in advertising or information and 3) confusion from presence of me-too markets and product proliferation resulting in too many

similar products. Afterwards, many researchers attempted to study confusion not as a result of market stimulus or product similarity but as a hurdle consumers come across in the course of decision making process.

Mitchell, Walsh, & Yamin (2004) attempted to study confusion under the new direction set by Mitchell & Papavassiliou (1999) and developed a conceptual framework of consumer confusion. Mitchell, Walsh, & Yamin (2004) explained the concept of consumer confusion in a meaningful way and related its significance to the study of consumer behavior and marketers as well. Mitchell, Walsh, & Yamin (2004) argued that since the beginning of the study of consumer confusion, the element of 'affect' as a part of confusion, had been ignored by researchers. Mitchell, Walsh, & Yamin (2004) proposed that consumer confusion is a form of attitude and should be conceptualized as an attitude. In their paper, Mitchell, Walsh, & Yamin (2004) proposed that there exists three dimensions of consumer confusion; 1) brand similarity confusion, 2) information overload confusion, and 3) ambiguity confusion; and therefore gave consumer confusion a three dimensional definition. Walsh, Hennig-Thurau, & Mitchell (2007) further expanded the study of confusion and developed a three dimensional scale for measuring the construct of consumer confusion. After the development of three dimensional scale for measuring consumer confusion by Walsh, Hennig-Thurau, & Mitchell (2007), many researchers have operationalized consumer confusion using the scale developed by Walsh, Hennig-Thurau, & Mitchell (2007) (for example Moon, Costello, & Koo, 2017; Shiu, 2017; Wang & Shukla, 2013; Ghosh & Rao, 2014) in order to study relationship between many different marketing constructs and confusion.

Since 2007 a number of studies have operationalized consumer confusion as dependent variable and independent variable as well. Majority of empirical studies have operationalized consumer confusion as an independent variable (for example Wang and Shukla, 2013; Ghosh &

Rao, 2014; Walsh & Mitchell, 2010; Matzler et al., 2007). Walsh, Hennig-Thurau, & Mitchell (2007) defined consumer confusion as a three dimensional construct, they developed a three dimensional scale, majority of all of the studies which have operationalized consumer confusion using Walsh, Hennig-Thurau, & Mitchell (2007) scale, have analyzed the effect of each dimension of confusion on dependent variable separately and reported the results accordingly. Wang & Shukla (2013) analyzed the effect of confusion on consumer's satisfaction and the role of choice goal as a mediator. Wang & Shukla (2013) carried out a survey, took smartphone as product category, and, obtained data from a convenient sample of three hundred and sixteen undergraduate students in UK who were smart phone users. Wang & Shukla (2013) operationalized consumer confusion by adopting the three dimensional scale developed by Walsh, Hennig-Thurau, & Mitchell (2007). Wang & Shukla (2013) concluded that confusion shares a negative relationship with satisfaction. They also reported that choice goals partially mediates the relationship between similarity confusion and satisfaction, while choice goal was found to fully mediate the relationship between ambiguity confusion and satisfaction, and also the relationship between information overload confusion and satisfaction.

Shiu (2017) studied the "antecedents and consequences of consumer confusion" in the context of retailing. Shiu (2017) hypothesized in-store stimuli and store knowledge as antecedent of confusion; and also tested for decision postponement and inertia as consequences of confusion. Shiu (2017) collected data from a sample of convenience store's consumers in Taiwan and upon analyzing the data found that the relationship between in-store stimuli and store knowledge, and decision postponement and inertia is mediated by similarity confusion. Shiu (2017) also reported that information overload confusion mediates the relationship between in-store stimuli, and

decision postponement and inertia. The study also concluded that ambiguity confusion does not act as a mediating variable between the antecedent variables, and consequence variables.

Ghosh & Rao (2014) analyzed the "effect of consumer confusion on word of mouth and buying decision", using "role of need for cognition" as a moderator. Ghosh & Rao (2014) carried out a survey, took smartphone applications as product category, and obtained data from a convenient sample of two hundred and fifty four postgraduate students in India. Ghosh & Rao (2014) operationalized consumer confusion by adopting the three dimensional scale developed by Walsh, Hennig-Thurau, & Mitchell (2007). Ghosh & Rao (2014) found that similarity confusion have negative effect on word of mouth and it positively affects buying decision. They also reported that information overload confusion negatively affects word of mouth, and also negatively affects buying decision. It was also reported that ambiguity confusion have a significant positive relationship with word of mouth and negative relationship with buying decision and, need for cognition acts as a moderator.

Shukla, Banerjee, & Adidam (2010) empirically tested the "antecedents and consequences of consumer confusion in financial services industry" in UK. This study operationalized confusion as independent variable and purchase decision as dependent. Shukla, Banerjee, & Adidam randomly administered survey questionnaire to more than nine hundred consumers in two cities of UK. Out of four hundred and sixty responses they received, only three hundred and twenty five responses were found to be usable. Their findings also revealed that consumer confusion significantly affects purchase decision.

Recent literature on consumer confusion is recognizing more and more factors which might contributes to confusion. Ermec, Sertoğlu, & Kavak (2017) propose that confusion arises mainly from firstly personal factors; such as individual personality and decision making style. Secondly situational factors such as time available for shopping and defining shopping task, and finally from social factors such as shopping with someone else. Ermec, Sertoğlu, & Kavak (2017) has developed a scale for measuring confusion. Their scale measures confusion as a function of personal, situational and social factors which creates confusion for consumers at the time of shopping.

#### 2.2.1 Dimensions of Consumer Confusion

Walsh, Hennig-Thurau, & Mitchell (2007) identified and defined three dimensions of consumer confusion namely; (a) similarity confusion, (b) information overload confusion and (c) ambiguity confusion. Each dimension is discussed in the following pages:

### (a) Similarity Confusion

Confusion caused by product or brand similarity had been a subject of research due to existence of me-too products and trademark infringement cases. Diamond (1981) proposed that consumers are likely to get confused by similarity between different brands; which occurs "when an imitator, so resembles the mark in appearance, sound, or meaning that a prospective purchaser is likely to be confused or misled". Similarity confusion was considered to be the basic form of confusion and as discussed previously, that immensity of similar products in the market leads consumers to get confuse about the origin of brand. Similarity confusion is also associated with similar advertising and similar messages conveyed to consumers about a product (Airbag, Arora, Handerson, & Kim, 2014). Walsh, Hennig-Thurau, & Mitchell (2007) define similarity confusion

as "Consumer's propensity to think that different products in a product category are visually and functionally similar."

Walsh, Mitchell, Kilian, & Miller (2010) suggest that the immensity of similar products available in the market is a result of either one of the four following situations: firstly, when an existing and well established manufacturer brand is imitated by a retailer these imitated retailer products are known as own brands. Balabanis & Craven (1997) define "Own brand lookalikes" as "products sold by large retailers whose packaging resembles that of the manufacturers' brand." Secondly, when an existing and well established retailer brand is imitated by a new or existing manufacturer brand. Thirdly, when the existing and established manufacturer brand is imitated by an existing or a new manufacturer, and lastly when the existing and established retailer brand is imitated by an existing or a new retailer. "Under these situations consumers are likely to perceive that the new imitated brand shares the origin with the pre-existed one which they have been buying in the past, and consumers evaluate the product on the quality standards of the familiar brand (Airbag, Arora, Handerson, & Kim, 2014; Howard, Kerin, & Gengler, 2000; Loken, Ross, & Hinkle, 1986; Walsh, Mitchell, Kilian, & Miller, 2010; Miaoulis & d'Amato, 1978).

#### (b) Information Overload Confusion

Product proliferation and presence of multiple similar products within a single category have generated a volume of information for consumers to process at a time (Mitchell, Walsh, & Yamin, 2004). Since so many products differ in very few aspects, the diversity of information about similar products seems very confusing to consumers (Mitchell, Walsh, & Yamin, 2004; Walsh, Hennig-Thurau, & Mitchell, 2007). Walsh, Hennig-Thurau, & Mitchell (2007) define information overload confusion as. "Consumers' difficulty when confronted with more product information and alternatives than they can process in order to get to know, to compare and to

comprehend alternatives." This definition asserts that the information overload confusion is a mental state when the amount of information surpasses the capacity of human brain to process it and to make sense out of it. Malhotra (1982) emphasized that paradigm of information-overload is established on the fact that, "consumers have finite limits to absorb and process information during any given unit of time"

There are numerous consequences attached to the information overload situation. Chestnut & Jacoby (1978), Jacoby (1984), and Jacoby, Speller, & Kohn (1974) proposed that "too much" information could result in "dysfunctional consequences" for consumers. Jacoby (1984) pointed out that in the prior studies of information overload, and its effects on consumers, information overload was operationalized as independent variable and "dysfunctional consequences" as dependent variable. Jacoby (1984) identified decision accuracy, time costs, and subjective states associated with information overload such as need for uncertainty reduction and satisfaction from final decision as the most studied forms of "dysfunctional consequences" attached to information overload. Information overload acts as a hurdle in making final purchase decision and also affects the quality of consumer's decision making (Jacoby, 1977; Malhotra, 1982; Malhotra, 1984).

Jacoby, Speller, & Kohn (1974), in an experiment, tested the effects of information overload on consumers. Information overload was operationalized as independent variable and its correlation with decision accuracy, time spent in making decision, confusion and satisfaction was examined in the experiment. The experiment design involved 192 subjects; volunteered housewives residents of greater Lafayette, Indiana, U.S. The subjects were instructed to act under a situation where they had just ran out of two products; rice and prepared dinners, and to pretend that they have come to supermarket just now to buy rice and prepared dinners. Then the subjects were also instructed that, in case they don't usually buy any of the two products, they are required

to try their best to work through the study as if they had been buying those products. Subjects were given the task to choose one package of rice and one package of prepared dinners from the different brands presented at supermarket. In order to help subjects in making their decision, they were provided with some information about each of the brands. And, then based on the information provided subjects were asked to select one brand which they liked most. The findings of the experiment showed that increase in the information provided was found positively correlated with time in making the buying decision; and also found to be negatively correlated with decision accuracy, confusion and satisfaction.

Malhotra (1982) proposed that; keeping in view the limited processing capacity of human brain's short term memory consumers when provided with "too much" information to process at a time, are faced with information overload situation which leads to poor decision making. In order to overcome inconsistency in the findings of information overload studies in the past, Malhotra (1982) attempted to investigate whether or not consumers get overloaded with products' information. Malhotra (1982) conducted experimental study to examine whether or not consumers experience information overload when their choice set widens; and whether or not this situation leads to poor decision making. The experiment randomly assigned twelve participants, residents of large metropolitan area in Georgia, U.S., to twenty five conditions. Each condition manipulated information about a set of hypothetical house profiles with five hypothetical attributes. Malhotra used self-reported measures of information overload, correct choice measures, and measures of subjective psychological state such as satisfaction to conclude the findings of the experiment. Results of Malhotra's (1982) experiment show that consumers face information overload when they are provided with the choice set of 10, 15, 20 or 25 alternatives with information provided for each alternative on 15, 20 or 25 attributes about each alternative.

Langer & Eisend (2007) conducted an empirical study and used an experimental method with two hundred and twenty six participants to test the causal relationship between information overload and confusion in eco-labels market. Langer & Eisend (2007) experimental study found that high number of eco-labels on product packages increases the confusion among consumers. The cognitive inability of consumers to deal with information overload makes consumers confuse, and confusion results in unwanted outcomes both for consumers and for marketers as well (Langer & Eisend, 2007).

## (c) Ambiguity confusion

This dimension of confusion is also known as un-clarity confusion as it arises from unclear information, ambiguous advertisement, and unrealistic product claims. Many studies in the past have emphasized on many different aspects of product which may cause ambiguity about the product, and its performance such as, complexity of product, ambiguity or un-clarity in product information, unrealistic or false claims about product, and ambiguity in price. Cox (1967), proposed that the concept of ambiguity confusion is related to the consumers' cognitive ability to deal with unclear information. Cox (1967), also proposed that when consumers face difficulty in comprehending with the information about a product and perceive the information to be un-clear they suffer from the state of cognitive un-clarity. Walsh, Hennig-Thurau, & Mitchell (2007) defined ambiguity confusion as "consumers' tolerance for processing unclear, misleading, or ambiguous products, product-related information or advertisements". Consumers who are prone to ambiguity confusion think that a product has different characteristics whereas, actual product may not possess those characteristics. Cornsih & Moraes, 2015 found that inconsistent or unclear product information also causes ambiguity confusion. Yi (1993), reported that product ambiguity is one of the determinants of consumer dissatisfaction.

Product ambiguity is mainly associated with product experience (Hoch & Ha, 1986; Yi, 1993). Ambiguity of product experience arises when it is difficult for a consumer to evaluate the quality of product. A product may appear ambiguous to a consumer when he/she cannot make any judgment about the quality of product based on an objective criteria such as in case of buying clothes or insurance policy. Another scenario in which a product may appear ambiguous to a consumer is when the criteria of making judgment about product quality is subjective, and consumer find it difficult to evaluate the product on subjective criteria. This situation occurs in case of products which possess many subjective attributes to its quality such as buying of diamonds, and gold ornaments.

According to Hoch & Deighton (1989) product ambiguity can also arise when one can make multiple interpretations about the quality of a product. According to Hoch & Ha (1986) advertisement of product can also induce the ambiguity about product experience. Today's marketplace offers consumers with latest high technology products and consumer electronics which offer multiple product features. Particularly products in the category of electronics possess features which are similar to the products in other categories. This merging of features across different categories is more likely to make a product ambiguous to consumers (Brun, Saetre, & Gjelsvik, 2009).

#### 2.3. Distrust (Mediator)

Literature describes the concept of distrust as the opposite of concept of trust. Many researchers suggest that trust and distrust are the same concepts which happen to lie on the opposite ends of a continuum. Some of the researchers argue that trust and distrust are distinct concepts but this proposition is not yet backed by empirical evidence (Chang & Fang, 2013; McKnight & Choudhury, 2006; Benamati et al., 2006). Also a vast body of research exists on trust but distrust

has received comparatively less attention of researchers (Lewicki, Tomlinson, & Gillespie, 2006; Chang & Fang 2006; Lau & Lee, 1999; McKnight & Chervany, 2001). Most of the research which distinguishes between trust and distrust exists specifically in the domain of online shopping where gaining trust of consumer in website or e-vendor is very crucial for websites to be successful (Lee & Turban, 2001; McKnight et al., 2003; Flavian & Guinaliu, 2006). In the context of online shopping, e-trust is proposed to be very different from e-distrust; and both are reported to have different antecedents and consequences (Mcknight et al., 2004; McKnight & Choudhury, 2006; Chang & Fang, 2013).

Lewicki, McAllister, & Bies, (1998) pointed out that when it comes to relationships, trust and distrust are considered to be the two sides of a coin. Both are mutually exclusive. Without trust, distrust cannot come into the existence. Rotter (1980) proposes that both trust/distrust are based on the previously made interactions with a party, and arise from a person's cumulative past experience with the same party. In a relational exchange before reaching a certain level of distrust, some sort of breach of trust takes place between the two parties (Lewicki, Tomlinson, & Gillespie, 2006; McKnight & Chervany, 2001). In this sense distrust occurs when trust is lost.

Consumers form relational exchange with the manufacturing brand or retailer when they buy their product for consumption (Chaudhuri & Holbrook, 2002). Many researchers have focused on studying the role of trust in promoting the relationship between consumer and brand, and found that loyalty towards a brand is built up when consumers place their trust in a brand. Many negative consequences attached to consumer confusion discussed in chapter One can hurt the consumers' relational exchange with brands. Confusion causes dissatisfaction, and it also negatively affects consumer trust (Mitchell, Walsh, & Yamin, 2010; Moon, Costello, & Koo, 2017). Therefore, this study proposes that confusion leads consumers to distrust the brand. Trust and distrust are opposite

concepts, and distrust arises after breach of trust. Therefore, to understand how confusion negatively affects trust and leads to distrust, it is imperative to understand both the concepts as one cannot be explained without having a good look at the other (McKnight & Chervany, 2001; Lewicki, Tomlinson, & Gillespie, 2006). Thus, in the following pages concept of trust and its importance for consumer-brand relationship is discussed and then the discussion is directed to the concept of distrust.

#### 2.3.1 Trust

In the disciplines of psychology, sociology and social psychology trust is the central variable for studying interpersonal relationships, and social interactions because it is the corner-stone of any valuable relationship. All these different disciplines have defined trust differently. Deutsch (1973) defined trust as "confidence that one will find what is desired from another, rather than what is feared." Scanzoni (1979) attempted to describe trust as "actor's willingness to arrange and repose his or her activities on other because of confidence that other will provide expected gratifications." Scanzoni (1979) argued that most likely in a relationship trust does not seem to exist between partners during the initial stage of relationship because of lack of experience with the partner in the past. Scanzoni (1979) also emphasized that trusting a person involves a willingness on the part of the trustor to put him/herself at risk of uncertainty about the trusted person's actions in future. Rotter (1980), without being specific to interpersonal relationships, proposed that trust is a part of individual's personality. Rotter (1980) defined trust as "a generalized expectancy held by an individual that the word, promise, or statement of another individual can be relied on." Moorman, Zaltman, & Deshpande (1992) emphasize that the concept of trust only holds when there lies an uncertainty in the relationship when one is unable to control the actions of the partner in an exchange relationship. Lewicki & Bunker (1995) suggest that

trusting a person or an institution reflects the human need of minimizing uncertainty in a relationship.

Delgado & Aleman (2003) reviewed extent of social sciences literature and found that the concept of trust was defined by many different terminologies and all those varied terminologies were used by authors to describe the idea akin to trusting in something or someone. Trivers (1971) defined altruistic behavior in humans as the selfless behavior shown by one person to benefit the other person who is not closely related while putting him/herself into an apparently detrimental situation while performing the behavior. Trivers's (1971) definition of altruistic behavior reflects the concept of trust which implies that in the time of need the trusted party will not violate the promise and will do whatever it needs to be done in the best interests of the partner. Frost, Stimpson & Maughan (1978) defined trust as "an expectancy held by an individual that the behavior of another person or a group would be altruistic and personally beneficial."

Many different definitions of trust share similarity in proposing that trusting in a person or a party entails that one holds a firm belief that the trusted person will stand by his/her promise and will not do anything against the expectations. Drawing on the above literature, trusting someone or something involves that under any circumstances the trusted person or a party will not take advantage of any weakness or vulnerable situation of their partner. The trustor willingly takes the risk to rely on the actions of the trusted one in future and have confidence that the actions and decisions of trusted person or a party will be in best interests of the trustor.

#### 2.3.2 Trust in Marketing

The construct of trust has received an extensive amount of research in the area of relationship marketing, where gaining trust is necessary for building long term relationship with suppliers and customers. Trust is commonly defined in relationship marketing as "a willingness to rely on exchange partner in whom one has confidence" (Moorman, Zaltman, & Deshpande, 1992). Morgan & Hunt (1994) proposed commitment-trust theory in which trust plays the role of key mediating variable for developing and sustaining marketing relationship with the various marketing partners including customers. Morgan & Hunt (1994) has defined commitment as "a strong desire and intention of the exchange partner to successfully maintain the relationship in future." Commitment-trust theory proposes that trust in the partner leads to the commitment towards the relationship and commitment leads to the successful long term relationship between the exchange partners. Therefore, without trust a successful relationship cannot form between the two parties, and if it does, that relationship cannot last longer.

In the area of marketing research brand loyalty, perceived quality, satisfaction and consumer value are considered as key marketing variables and a great body of research, focusing on these key constructs, exists in literature. Consumer trust did not get much attention of marketing researchers despite its relevance to the purchase decision and satisfaction. The relational orientation in marketing brought the concept of trust to limelight. Lau & Lee (1999) have stressed that the concept of trust in marketing is also rooted in interpersonal relationships. When Fournier (1998) explored the talismanic relationship between consumers and their brands, and developed consumer-brand relationship theory, the focus of research in marketing shifted from brand loyalty to non-functional attributes of product beyond satisfaction and repurchase intentions. After the emergence of relational orientation and consumer-brand relationship theory, researchers

recognized trust as one of the non-product attributes which has significance beyond the satisfaction and repurchase intentions (Sung & Campbell, 2009; Chaudhuri & Holbrook, 2001; Delgado & Aleman, 2001).

Trust in marketing is commonly studied from consumers' perspective and is defined as "set of expectations consumers hold about a manufacturer" (Moorman, Deshpande, & Zaltman, 1993). Consumers form relational exchange with the manufacturing brand or retailer when they buy the product for consumption (Chaudhuri & Holbrook, 2002). In the context of consumption the product itself is the symbol of relational exchange between the consumer and the manufacturing brand (Albert and Merunka, 2013). Consumers form expectations about the performance of product, and, its certain functional and non-functional attributes, and rely on the brand to fulfill their expectations in exchange of buying the product (Delgado & Aleman, 2001). Hence, a relationship is developed between consumer and product or brand. Lewicki & Bunker (1995) suggest that trust is developed overtime between two persons by constant interactions, and by experience with early relationship. Likewise in the context of consumption, when a consumer regularly buys the same product from the same brand it indicates the consumer's satisfaction, and good experience with the product. Experience with the brand and continuous product usage makes consumer to form certain expectations from the manufacturer, and to trust the brand.

In consumer-brand relationship, consumers symbolize brand as their exchange partner in relationship (Jeon & Baeck, 2016). Consumers form expectation from the brand, and tend to rely on those expectations (Lau & Lee, 1999). Marketers define consumer trust as "consumers' willingness to rely upon their expectations about a manufacturer's future behavior" (Morgan & Hunt, 1994). This definition indicates consumers' relational exchange with the product manufacturer. It is clear from the definition that consumers make certain product expectations, and

rely on the manufacturer to fulfill those expectations. When consumers trust that the manufacturer will deliver them with the promised product, consumers become committed to the brand which results in increased sales revenue over longer period of time, (Chaudhrui & Holbrook, 2001) and enhanced brand equity (Delgao & Aleman, 2005).

#### 2.3.3 Brand Trust

Delgado & Aleman (2003) propose that consumers place their trust in a brand on the basis of two dimensions. First dimension of brand trust, namely ability, assumes that the brand has the capacity to consistently serve its consumers in future. Second dimension, namely reliability, assumes that the consumers rely on the future actions and intentions of the brand in this case consumers believe that the future offerings of the brand will be centered on benefiting its consumers. These two dimensions of brand trust resemble interpersonal trust which is also based on expectations from the exchange partner and relying on partner in time of uncertainty.

#### 2.3.4 Distrust

The definitions of the concept of distrust available in the literature are opposite of the concept of trust and involve the terms like "not" "doubt" "negative" "suspicion". Most of the English dictionaries define distrust as "lack of trust" or "absence of trust". Barber (1983) defined trust as "rationally based expectations that technically competent performance and/or fiduciary obligation and responsibility will be forthcoming." The same author defined distrust as "rationally based expectations that technically competent performance and/or fiduciary obligation and responsibility will **not** be forthcoming." Lewicki, McAllister, & Bies (1998) defined trust as "confident **positive** expectations regarding another's conduct" and distrust as "confident **negative** expectations regarding another's conduct." Distrust entails that one is not willing to rely on the

other party, and have certain expectations that the actions of the other party will produce negative outcomes.

There is a consensus in literature that the concept of trust and distrust are opposite to each other but both constructs are separate from each other. Many researchers argue that trust and distrust are not the two extreme levels of same conceptual continuum as low level of trust is not similar to distrust and total absence of distrust is not similar to trusting is someone. So far this proposition lacks empirical support (Lewicki, McAllister, & Bies, 1998; Lewicki & Bunker, 2001; Mcknight & Chervany, 2001). Since trust and distrust are opposite concepts, literature has regarded opposite of antecedents and consequences of trust as antecedents and consequences of distrust (Chang & Fang, 2013).

Given the significance of trust in consumer-brand relationship marketing researchers studied the role of trust as mediating variable, and found that trust leads to many positive marketing outcomes. Following the proposition that trust and distrust are opposite concepts, in the following pages the role of trust as mediator in marketing literature is discussed, and, it is logically proposed that any variable which negatively affects consumer trust leads consumers to distrust the brand.

#### 2.3.5 Trust as a Mediator in Literature

Since gaining trust is critical for developing and maintaining any long-term relationship, consumer trust is also an essential component of consumer-brand relationship. Garbarino & Johnson (1999) attempted to analyze the relationship between trust, commitment, satisfaction and future purchase intention of consumers who form high or low relation with the firm in the service sector. Garbarino & Johnson (1999) sent one thousand survey questionnaires to randomly selected customers of New York Theater Company, and received four hundred and one filled questionnaire from customers. After analyzing the data, Garbarino & Johnson (1999) found that trust and

commitment mediates the relationship between product components and future purchase intentions for the customers who form high relations with the firm. Mcknight et al. (2002) constructed a model which provided a framework of intention of consumers to engage with an online vendor, and proposed consumer trust in the website as the mediating variable. Mcknight et al. (2002) proposed that trust makes consumers to ignore the factor of risk and uncertainty, and allows them to transact with the website. Empirical findings of Mcknight et al. (2002) study support their proposed framework and suggest that building of consumer trust in electronic vendor leads to success of a website.

By placing their trust in the firm or a brand, consumers expect that in future the manufacturer will deliever promised offerings it made through advertisment. In the context of consumption, the manufacturer needs to gain consumer trust by maintaing its product quality overtime. (Delgado & Aleman, 2001). Consumers who trust certain brands believe that their brand partner works for their best interest and it will continue to benefit them by offering additional features in the product and by catering their every need in future. Consumers trust that the decisions and actions of the manufacturing firm will never hurt their interest and the firm will never take advantage of consumers' vulnerability (Moorman, Deshpande, & Zaltman, 1993). Consumer trust also entails that the manufacturing firm will help them out in case of problem with product shopping or usage. Since consumers who trust their partner brand have lessor doubts about the future actions and intentions of the brand, therefore committing to brand partner becomes easy (Delgado & Aleman, 2003). In a nutshell, as supported by many empirical studies (for example Bhandari & Rodgers, 2018; Moorman, Zaltman, & Deshpande, 1992; Morgan & Hunt, 1994; Ganesan & Hess, 1997; Sung and Campbell, 2009; Garbarino & Johnson, 1999; Sargeant & Lee, 2004; Dholakia, 1997; Chaudhuri & Holbrook, 2001; Chaudhuri & Holbrook, 2002) trust in the

brand partner leads to consumer commitment towards the relationship, and trust is the key mediator for relationship sustaining behaviors.

#### 2.3.6 Trust and Consumer Commitment & Purchase Intention

Delgado & Aleman (2001) using the perspective of relational orientation in the discipline of marketing, conducted a research in Spain to understand the relationship between brand trust and future purchase intention. They proposed a hypothesis that brand trust is the key diver of consumer commitment towards the brand. Delgado & Aleman (2001) performed regression and multivariate analysis on the data collected from a sample of one hundred and seventy three buyers (mothers buying disposable nappies for their infant babies), and, found that the results supported their proposed hypothesis. Ahluwalia, Burnkrant, & Unnava (2000) in an attempt to develop a theoretical framework to understand how the negative information about manufacturers and brands affects consumers, conducted two experiments, and found that consumers' commitment towards the brands they buy acts as a moderator for consumers' response. Ahluwalia, Burnkrant, & Unnava (2000) experiments and theoretical framework shows that negative publicity does not significantly impact consumers with high commitment towards the selling manufacturer or brand. Positive image of a brand as perceived by committed consumers appeared not to be contaminated significantly by negative publicity.

Giampietri et al., (2018) explored the role of trust in formation of consumers' purchase intention of short food supply chain in Italy, and found that trust is a significant determinant of purchase intention.

Garbarino & Johnson (1999) reported that consumers' trust in brand and commitment towards it act as a mediating variable between product components, and future purchase intention

for high relational customers in service sector. Pimentel & Reynolds (2004) define affective commitment as the level of emotional attachment of consumers with the product; and such consumers incorporate the product as part of their self-concept. Pimentel & Reynolds (2004) developed a model of "consumer devotion" by focusing on sports fans, and after conducting interviews with various sports fans they found that fans who hold affective commitment towards a sport brand or a sports team engage in relationship sustaining behaviors. Consumers' engagement in relationship sustaining behavior implies that the severity of competition and competitors brands' offers do not appear to be significantly appealing to committed consumers (Sung & Campbell, 2009; Bhandari & Rodger, 2018).

# 2.3.7 Trust/Distrust and Brand Loyalty

Sirdeshmukh, Singh, & Sabol (2002) developed a framework which shows various mechanisms, which in relational exchange, convert consumer trust into the value and loyalty. Sirdeshmukh, Singh, & Sabol (2002) empirically tested their framework on the data collected from retail clothing (n=264) and airline travel industry (n=113) in U.S. The results of their study supported the proposed framework which places consumer trust as the driver of consumer value and consumer loyalty. Amine (1998) developed a conceptual framework, which proposes that consumer commitment is the main motive behind the true brand loyalty.

Huang (2017) proposed that brand love and brand trust mediates the relationship between consumers' brand experience and brand loyalty. To test the proposed hypotheses Huang (2017) conducted a survey, using quota sampling. Huang (2017) distributed survey questionnaire to the college students (ages 18-30) from four different universities in Taiwan. The respondents were mobile phone users, and before attempting to fill out the questionnaire, a well-trained interviewer approached respondents and asked them to recall the mobile phone brand they buy the most or

bought most recently from the list of 8 mobile phone brands (Samsung, HTC, Apple, Sony Ericsson, Nokia, Asus, Acer and other) given in the questionnaire. And then respondents were instructed to respond to the questionnaire with regard to the chosen brand. Huang (2017) received a total of three hundred and twenty three responses, and two hundred and thirty seven usable responses were analyzed. The results of the study show the relationship between brand experience and brand loyalty is mediated by brand love and brand trust.

Menidjel, Benhabib, & Bilgihan, (2017) conducted an empirical study in order to analyze the relationship between trust, brand satisfaction and brand loyalty, and moderating role of personality trait. Their findings, after collecting survey data from four hundred and forty three respondents, show that brand trust mediates the relationship between brand satisfaction and brand loyalty.

# 2.3.8 Brand Trust and Brand Equity

Keller (1993) has defined "customer based brand equity" as, "the differential effect of brand knowledge on consumer response to the marketing of the brand." Keller (1993) proposes that customer based brand equity is established when the brand becomes familiar to the consumer and they have brand associations in their memory. Keller (1993) has defined brand image as, "perception about a brand as reflected by the brand associations held in consumer memory." Keller (1993) proposes that a favorable brand image is the major component of positive brand equity. Delgado & Aleman (2005) emphasize that brand equity is the result of relationships that consumers build with the brands and, trust like in any relationship, is the corner-stone of consumer-brand relationship. Delgado & Aleman (2005) developed a theoretical model to understand the relationship between the brand trust and brand equity. Their model positions brand trust as mediating variable between brand satisfaction and brand loyalty, which results in positive brand

equity. In order to test their model, Delagado & Aleman (2005) adopted quantitative strategy and obtained two hundred and seventy one questionnaires filled out by households in south eastern part of Spain, the findings of the analysis revealed that brand trust partially mediate the relationship between brand satisfaction and brand loyalty, and shares a positive relationship with brand equity.

#### 2.3.9 Trust/Distrust and Love for Brand

When consumers fall in love with their partner brand in a relationship, this loving relationship is similar to the close interpersonal relationship. Trust happens to be one of the most appealing and desired features in the close relationships of all types (Rempel, Holmes, & Zanna, 1985). Rempel, Holmes, & Zanna (1985) carried out a survey using a sample of couples, and found that at that stage when a close interpersonal relationship has been developed between two partners the level of trust also progresses. Rempel, Holmes, & Zanna (1985) propose that with the passage of time the experience of trust is no longer demonstrated by behaviors but reaches to the next level of attribution of interpersonal motives. Akin to close interpersonal relationship, trusting the loved brand is inevitable in consumer-brand relationship (Fetscherin, 2014). Love for brand is developed from trusting the partner brand; if a consumer cannot trust a brand he/she won't buy it again for consumption. Consequently, without trust the probability of developing any sort of relationship with brands becomes zero.

In the light of above discussion, the literature provides theoretical and empirical evidences about trust being the key mediating variable in any valuable interpersonal or social relationship. Following the relational orientation in the literature of marketing and consumer behavior, satisfied consumers who make repeat purchases develop an emotional relationship with the brand. Consumer-brand relationship resemble interpersonal relationship in which a consumer treats the product or brand as a relationship partner like a human counterpart in an interpersonal relationship

(Fournier, 1998; Shimp & Maiden, 1998). Larzelere & Huston (1980) emphasize that the interpersonal trust holds the utmost importance in close relationships, and define trust as "benevolence and honesty for the partner in exchange relationship." A loving relationship between consumer and brand comprises of commitment, passion and intimacy (Shimp & Maiden, 1998). Since trust is the corner-stone of any valuable relationship, consumer-brand relationship is also based on trust which leads to commitment towards the brand, which in turn forms future purchase intention and is a driver of brand loyalty and customer retention (Gustafson et al., 2005). Brand trust leads to affection for brand which further leads to positive performance of brand (Chaudhuri & Holbrook, 2001). In relational exchanges trust results in creating value and loyalty (Sirdeshmukh, Singh, & Sabol, 2002).

In the same sense, distrust becomes the mediator, where the independent variable is expected to have negative effects on trust and dependent variables which might as well produce negative outcomes for both consumers and marketers. Confusion causes psychological distress in consumers. Confusion damages the reputation of the brand. Confusion results in decision postponement (Shiu, 2017) which is a clear sign of distrust. Confusion negatively affects trust (Mitchell, Walsh, & Yamin, 2010) hence, this research hypothesizes distrust as the mediating variable between consumer confusion and dependent variables; brand love, and brand image.

Fig. 1 Consequences of trust in the light of existing literature



# 2.3.10 Distrust and Confusion

Lewicki, Tomlinson, & Gillespie (2006) reviewed the dynamics of distrust and proposed that it is possible for trustor to experience distrust towards the trusted partner in a relationship. Lewicki, Tomlinson, & Gillespie (2006) proposed that distrust in the partner can arise from one of the three factors 1) psychological and cultural factors, 2) bad and untrustworthy reputation of the exchange partner, and 3) certain situational factors that are critical to foster judgments of distrust. In consumer-brand relationship distrust in brand can also arise from the three factors mentioned above; and consumer confusion has its role to play in causing consumer distrust in a brand.

Wobker, Eberhardt, & Kenning (2015) developed a conceptual framework for studying the various outcomes of confusion on consumers in German food retailing industry, and proposed consumer trust in the food industry as the moderating variable which is capable of altering the negative outcomes associated with confusion. Wobker, Eberhardt, & Kenning (2015), in order to empirically test their framework, collected data from five hundred and sixteen food buyers, and found the results in support of their proposed framework.

Walsh & Mitchell (2010) empirically analyzed the effect of confusion on word of mouth, broader marketplace trust and macro-satisfaction. They collected survey data, using proportional quota sampling technique, from a sample of three hundred and thirty five college students in Germany. Walsh & Mitchell (2010) operationalized consumer confusion by adopting the three dimensional scale developed by Walsh, Hennig-Thurau, & Mitchell (2007). Upon analyzing the data, Walsh & Mitchell (2010) found that similarity confusion negatively affects customers' word of mouth behavior, trust and macro satisfaction. Findings of their study also revealed that information overload confusion positively affects word of mouth, negatively affects macro satisfaction, and does not significantly affect marketplace trust. Ambiguity confusion was found to positively impact general word of mouth and marketplace trust, and was not found to significantly impact macro satisfaction.

Moon, Costello, & Koo (2017) studied the "impact of consumer confusion on negative word of mouth, distrust and dissatisfaction, and role of negative emotions as a mediator." The study was carried out for eco-labels products in food and detergent product categories. The data was collected from the consumers in Korea. Moon, Costello, & Koo (2017) conducted quasi experimental field study, and collected data from three hundred and ten consumers of eco-label food products and detergents. Consumers were approached by a professional interviewer in

shopping malls, offices and homes. They were provided with a booklet to read and browse, and were asked to participate in the experiment. Out of all the three hundred and ten participants who agreed to participate in the experiment only those who had purchased food or detergent products with eco-labels previously within the past three months were allowed to answer the questionnaires. Two hundred and nighty eight usable responses were analyzed. The results of the quasi experiment show that similarity confusion, information overload confusion and ambiguity confusion leads to dissatisfaction, distrust and negative word of mouth, and negative emotions were found to mediate these relationships.

## 2.4 Brand Image

In the literature of brand most of the studies have used the words "product" and "brand" interchangeably with each other. Whereas, it is well known that in the discipline of marketing the concept of brand and product are two distinctive concepts. The literature on brand image and brand love also uses the terms of 'product' and 'brand' interchangeably in the sense that the consumer's feelings towards any brand is a result of the experience of using its product and the benefits consumer get from using the product. Therefore, the discussion about brand image and brand love in the following pages also uses the term 'product' and 'brand' interchangeably.

Past researchers have reported that people not only buy products for their physical and functional attributes but also for many other non-physical attributes. In other words, products have social and psychological nature in addition to the physical ones (Gardner & Levy, 1995). Brand image was first introduced formally into the discipline of marketing in 1950's. Since then the concept of brand image has become a subject of intensive research in the discipline of marketing and consumer behavior, and many researchers have defined this concept in many different forms (Dobni & Zinkhan, 1990). Gardner & Levy (1995) for the first time conceptualized brand image

in a meaningful manner. They grounded their definition on the concept of non-physical attributes of the product, and defined brand image as "a set of feelings, attitudes and ideas consumers hold about the brand" which are crucial for making a purchase choice.

Dobni & Zinkhan (1990) in a survey of literature on brand image found that, there exists a variation in conceptualizing brand image among several authors. The variation is based on five aspects related to brand image: (1) the different terminologies and names given to the concept by different authors, (2) the diversity in the definitions, (3) the elements and dimensions of brand image, (4) use of numerous instruments to measure it, and (5) perspectives on the origin and creation brand image. Also, they found that formal definitions of brand image available in the literature are classified into 5 categories as follow;

- 1) **Blanket Definition:** These are the very broad definitions of brand image available in literature which are too broad to ascribe a meaningful understanding of the concept. However, these definitions are crucial in an understanding of brand image as an abstraction such as Newman (1957) defined brand image as, "everything that people relate to the brand".
- 2) Emphasis on Symbolism: The act of consumption is more important to consumers as a symbolic behavior rather than the functional benefits of the products. A group of definitions emphasize on the symbolic aspect of brand image, and putting labels on it such as "symbolic utility" "the symbols by which we buy", and "perceived product symbolism". These definitions imply that consumers consciously attach symbols to brands which reflect their self-concept. When the image of a brand is congruent to self-concept of consumers it promotes positive behavior and attitudes toward products among consumers (Jamal & Goode, 2001; Malik et al., 2013).

- 3) Emphasis on Meanings and Messages: The focus of the definitions in this category is the underlying meaning consumers attach to a brand. As all the brands in the same product category do not vary in what they denote, in order to make a distinction each brand must rely on the meaning consumers attach to it. These definitions define brand image as meanings consumers ascribe to a brand from the messages which differentiate one brand from rest of the others. In the same vein Levy (1985) talks about these meanings are formed as a result of experiences that consumers have with the product. Brand Image is defined by Reynolds & Gutman (1984) as "the stored meanings that an individual has in memory." This definition suggests that the meaning we attach to the image of a brand is related to anything we have remembered about the brand, and we retrieve that attribute of brand from our memory every time we see or think of that brand name.
- 4) Emphasis on Personification: Definitions in this category emphasize that brand image is the reflection of brand personality. Researchers in this category simply suggest that products possess human personality like images, or they distinctively reflect human factor, such as "gender" image, "age" image, or "social caste" image.
- 5) **Emphasis on Cognition or Consumer Psychology:** The definitions in this category incorporate the dimensions of attitude, feelings, ideas, expectations, mental constructs and understanding. Only those definitions of brand image which incorporate the dimensions of consumers' feelings, and attitudes towards brand fall into this category.

This research uses Aaker's (1996) definition of brand image. Brand image is "how a brand is perceived by consumers", this definition emphasizes on the way how a brand name stays in the mind of consumers (Aaker, 1996). Brand image is imperative to study consumer behavior because it leaves an impression in the mind of consumer, and leads to the formation of purchase intention

(Aghekyan-Simonian, Forsythe, Kwon, & Chattaraman 2012; Calvo Porral & Lang, 2016). Multiple studies have reported that brand image aids consumers in decision making (Djatmiko & Pradana, 2016; Cretu & Brodie, 2007; Batra & Homer, 2004; Cobb-Walgren et al., 1995; Malik et al., 2013).

Brand image helps in establishing brand's position in the market, protecting the brand from intense market competition, and enhancing the performance of brand in the market. Hence, a favorable brand image is vital for building consumer based brand equity (Keller, 1993). Popular global brands of various products such as apparels like Armani, Louis Vuitton and Gucci enjoy a global goodwill of brand name and hold a manufacturer global brand image for classy and high quality products. Image of these brands have created a desire in masses to get the ownership of their products (Yoo & Lee, 2009). When marketers are successful in creating a positive brand image, more consumers are attracted to buy the product of that brand, and willingly pay price premium for the brand with established positive image (Anselmsson, Vestman Bondesson, & Johansson, 2014). A positive brand image conveys to consumers about the needs which are catered by the brand. It also highlights how the brand is serving the consumers better than the rest of the brands which offer the same product (Yu, Lin, & Chen, 2013; Zhang, 2015; Hsieh, Pan, & Setiono, 2004). Positive brand image leads to brand loyalty (Keller, 2016; Alhaddad, 2014; Nyadzayo & Khajehzadeh, 2016). Keller (1993) proposes that "a favorable brand image is the key driver of brand equity."

Brand image guides the consumer behavior and differentiate a brand from the existing brands in the same product class; whereas confusion makes consumers to doubt about the uniqueness of the brand. When a brand appear to confuse consumers, a negative perception about the brand is formed in the minds of the consumers. Consumers' negative perception about a brand negatively

affects brand equity (Kocyigit & Ringle, 2011), thus destroying the good image of the brand. Therefore, in the light of the above findings this research proposes first hypothesis as given below;

**H**<sub>1</sub>: Brand image have a negative relationship with consumer confusion and distrust mediates this relationship

#### 2.5 Brand Love

We use the word 'love' almost every day for many things we like and activities we do. (Albert, Merunka, & Valette-Florence, 2008). For example: 'I love this weather', 'I love this color', 'I love to read', 'I love this dress' and many more phrases like this. By using this word we try to show to someone our feelings and desire for anything we like very much. The term "Love" can be used to refer to an existence of social relationship between two persons, and to a state of emotion (Albert, Merunka, & Valette-Florence, 2009; Albert & Valette-Florence, 2010; Heinrich, Albrecht, & Bauer, 2012).

Love is a psychological state of emotion (Albert, Merunka, & Valette-Florence, 2008). Consumers claim to have feelings of love for the products they buy and integrate such products as part of their self-identity (Ahuvia, 2005). For example: I love my perfume its fragrance perfectly defines my personality. Belk (1988) proposes that the people define themselves by possessions they hold and the products they consume. According to Belk (1988) people incorporate the objects they consume and possessions they hold as a part their extended self.

The construct of brand love is used by researchers to conceptualize love-like feelings for a product or a brand in consumers-object relationship. In the context of consumption the concept of brand love is an integral part of consumer-brand relationships, and its study is crucial to understand consumer-brand relationships (Albert & Merunka, 2013; Jeon & Baeck, 2016). Consumers

associate human personality-like traits to a brand which build up brand personality. In this way consumers form relationship with brands just like their relationship with human counterparts in an interpersonal relationship (Fournier, 1998). Kevin Roberts (2005), CEO of Saatchi and Saatchi, proposes that brand love makes consumers emotionally attached to the brand and this emotional attachment is the key driver of "loyalty beyond the reason". Therefore, brand love, though introduced recently in the discipline of consumer behavior, is gaining more and more attention of practitioners as well as academicians.

Triangular theory of love proposed by Sternberg (1986) is the most popular theory on interpersonal love in the field of social psychology. Sternberg (1986) triangular theory of love proposes that a loving relationship between two persons comprises of intimacy, passion and decision/commitment. Shimp & Maiden (1998) adopted the work of Sternberg (1986) in order to study the consumer-object relationship. Shimp & Maiden (1998) propose consumers' love for objects consists of three dimensions: 1) liking, 2) yearning, and 3) decision/commitment. Majority of research supports the similarity in interpersonal love and consumers' love for brand in consumer-brand relationship (Caroll & Ahuvia, 2006; Fournier, 1998; Shimp & Madden, 1988; Whang, Allen, & Zhang, 2004; Ahuvia, 2005). The body of research on interpersonal love has operationalized love as a multidimensional construct.

Fournier (1998) developed the theory of consumer-brand relationship with the brands they buy, and listed 15 forms of consumer-brand relationship. Fournier (1998) identified and reported the following dimensions of brand relationship quality (BRQ), namely 1) love and passion, 2) self-connectedness, 3) interdependence, 4) commitment, 5) brand partner quality, and 6) intimacy. Fournier (1998) recognized love and passion as an essential dimension of BRQ, but did not give any conceptualization of the construct.

Ahuvia (1993) for the first time tried to conceptualize the feelings of love consumer have for the objects they integrate into the self. Caroll & Ahuvia (2006) for the first time attempted to define the brand love as, "the degree of passionate emotional attachment a satisfied consumer has for a particular trade name." In defining brand love these authors describe its five distinctive characteristics: 1) passion for the loved brand, 2) emotional attachment with the loved brand, 3) biasness for the loved brand, 4) arousal of good feelings for the name of brand, and 5) Openly declaring to others about have feelings of love for the brand. These distinctive features help us to understand the notion of love in consumption context. However, their definition of brand love have been criticized by many researchers who have attempted to define brand love more recently.

Whang, Allen, & Zhang (2004) in an attempt to study whether or not consumers form romantic relationship with the product akin to a love relationship with a human counterpart, used the scale of interpersonal love to measure the romantic love bikers have for their bikes. The findings of their research suggested that the love bikers had for their motorcycles was similar to interpersonal love which is passionate, possessive and selfless in nature.

Keh, Pang, & Peng (2007) argue that Carroll & Ahuvia's (2006) definition of brand love overlooks the cognitive aspect of love. They defined brand love as "a reciprocal, dynamic, multiplex, and purposive relationship between satisfied consumers and their brands". Moreover, these authors suggest that brand love has three dimensions akin to the Sternberg's (1986) theory of love namely; 1) brand intimacy, 2) brand passion, and 3) brand commitment. This thesis uses Keh, Pang, & Peng (2007) definition of brand love.

Bauer, Heinrich, & Albrecht (2009) conceptualized and operationalized the construct of brand love by drawing on the literature of interpersonal love in the discipline of psychology and on consumer-object love in the discipline of social sciences. In order to establish relevance of

brand love construct to marketers and practitioners, they linked brand love to two marketing-related variables, namely "willingness to pay a price premium" and "willingness to forgive". The findings of their study show that brand love positively effects on consumers' perception about the brand and consumers willingly pay premium price for the product as well. Consumers who exhibit brand love also show high tolerance when their beloved brand "pulls a boner" and forgive easily.

After conducting extensive interviews with consumers Ahuvia, Batra, & Bagozzi (2008) found that when consumers love an object or a product they find it "intrinsically rewarding" (i.e. they experience as if they are rewarded by using the product). Because the loved products were intrinsically rewarding, and because of the sense of "rightness" felt by respondents after using the products, the respondents considered them as extended part of their selves. Many marketing researchers have found that consumers incorporate the products they consume as a part of their self–identity (Ahuvia, 2005; Fournier, 1998; Belk, 1988; Jamal & Goode, 2001; Malik et al., 2013).

When consumers form emotional relationship with the brands they buy, they feel intrinsically rewarded and fall in love with such products (Batra, Ahuvia, & Bagozzi, 2012). Consumers tend to depend on such products. Just like in an interpersonal relationship consumers believe that the other brands are not like the brand they love and the products from other brands in the market are not like the product offered by their loved brand. Consumers believe that the similar rewarding experience does not come from every brand. Fournier's (1998) theory of consumer's relationship with their brands proposes that consumers engage in 1) accommodation, 2) tolerance /forgiveness, 3) biased partner perceptions, 4) devaluation of alternatives, and 5) biases with their loved brand. Consumers do so for the stability of their relationship with the loved brand. Confusion

leads consumers to have second thoughts about their beloved brands. When they see so many manufacturers are providing the same product with almost similar claims consumers can be confused about relying on their partner brand. Consumers happily pay premium price for their loved brands (Albert and Merunka, 2013), pass on positive word of mouth about the brand (Roy et al., 2013; Bagozzi, Batra, & Ahuvia 2017; Karjaluoto, Munnukka, & Kiuru, 2016), do not bother about negative information associated with brand (Bagozzi, Batra, & Ahuvia, 2017; Batra, Ahuvia, & Bagozzi, 2012; Jeon & Baeck, 2016; Wallace & Buli, 2014), and forgive brand in times of disappointment or not getting expected product or services (Hegner, Fenko, & Teravest, 2017). Following the above discussion this research proposes to study its second hypothesis as given below;

H<sub>2</sub>: Brand have a negative relationship with consumer confusion and distrust mediate this relationship.

Table 2 Hypotheses of the study

Sr. No	Hypotheses
1	H <sub>1</sub> : Brand image have a negative relationship with consumer confusion and distrust
	mediates this relationship.
2	H <sub>2</sub> : Brand love have a negative relationship with consumer confusion and distrust
	mediates this relationship.

 Table 3 Summary of Relevant Literature

#	Author, year	Sampling	Sample type	Product	Dependent	Independent	Proposesd	Mediator	Analysis
	and country				Variable	Variable	Relationship		
					( <b>DV</b> )	(IV)			
	Moon, Costello	Convenient		Eco-labels in	Negative	Consumer	(+)ve		
	and Koo	sampling		food and	Word of	Confusion	(-)ve		
	Korea (2017)	n=310		detergent	Mouth		(+)ve	Negative	Quasi Experiment
					Distrust		(T)VC	Emotions	field study
					Dissatisfaction				
2	Shiu Taiwan (2017)			Retail store	Decision Postponeme nt Inertia	Stimuli Store Knowledge		Consumer Confusion	
3	Huang Taiwan (2017)	Quota Sampling n=237	Age 18-30 College Students Mobile phone users	Mobile Phone Brands	Brand Loyalty	Brand Experience	(+)	Brand Love Brand Trust	Survey (PLS, SEM)
4	Veloustsu (Scotland) (2015)				Brand Loyalty	Brand Evaluation Satisfaction Trust	(+)ve (+)ve (+)ve	Brand Relationship	
5	Walsh & Mitchell (Germany) (2010)	Proportion al quota sampling n=335	College Students		Word of Mouth Trust Satisfaction	Consumer Confusion	(+)ve (-)ve (-)ve	None	Survey (PLS,SEM)
6	Wang & Shukla (UK) (2013)	Convenient Sample n=316	Undergrad Students	Smartphon- es-	Satisfaction	Consumer Confusion	(-)ve	Choice Goals	Survey (PLS,SEM)
7	Walsh, Kiliam& Miller(UK) (2009)	Convenient Sampling n=220	College Students	Mobile Phones Chocolate Bars Beauty Products	Word of Mouth Trust Brand Loyalty	Perceived Product Similarity	(+)ve (-)ve (-)ve	None	Survey (CFA,SEM, ANOVA & Cluster Analysis)
8	Fetscherin, Boulanger,Sou ki & Filho (Brazil) (2014)	Random Intercept at Malls n=800	Shoppers at mall	Soft drinks Mobile Phones Shoes Cars	Purchase Intention Post Purchase Word of Mouth	Brand Love Brand Loyalty	(+)ve (+)ve	None	Survey (EFA,CFA, SEM &ANOVA)

#	Author, year	Sampling	Sample type	Product	DV	IV	Proposesd	Mediator	Analysis
	and country						Relationship		
9	Kocyigit & Ringle (Germany) (2011)	Convenient Sampling n=900	Detergent consumers	House Hold Detergents	Private Label Proneness	Brand Confusion	(+)ve	Sustainable Brand Satisfaction	Online Survey (PLS,SEM)
10	Ghosh & Rao (India) (2014)	Convenient Sampling n=254	Postgraduate Students	Mobile Phone Application	Word of Mouth Buying Decision	Consumer Confusion	(+)ve (-)ve	None	Survey (PLS,SEM)
11	Yasin & Shamim (Pakistan) (2013)	Simple Random Sampling n=265	Mobile Phones	Mobile Phone Users	Purchase Intention Word of Mouth	Brand Experience Brand Trust Affective Commitme -nt-	(+)ve (+)ve (+)ve	Brand Love	Survey (Correlatio n and Regression Analysis)
12	Sallam (Saudi Arabia) (2014)				Purchase Decision Making	Brand Love	(+)ve	Word of Mouth	Conceptual Framework
13	Pang ,Keh & Peng (China) (2009)	Convenient Sampling n=100	College Students	Advertising	Rational Advertising Emotional Advertising	Brand Love		None	Experiment (ANOVA)
14	Hwung & Kandampully (USA) (2012)	Convenient Sampling n=120	Undergrad Students	Fashion Brands	Brand Loyalty	Brand Love Self Concept Emotional Attachment	(+)ve (+)ve (+)ve	None	Self selected online survey (CFA & SEM)
15	Tjiptono, Fandy, Aril, Denni, Bucci &Tania (Indonesia) (2014)	Combinati on of convenient and purposive sampling n=313	Undergrad Students		Word of Mouth Trust Satisfaction	Young Consumers' tendency to confuse	(+)ve (-)ve (-)ve	None	Survey (SEM)
16	Shukla, Banerjee & Adidam (UK) (2010)	Random Sampling n=460	Users of financial services	Financial Services	Purchase Decision	Overall Confusion Attribute Satisfaction Information Satisfaction	(-)ve (+)ve (+)ve	None	Survey (Path Analysis)
17	Matzler, Waiguny & Fuller (Austria) (2007)	Convenient Sampling n=180	Online shoppers	Internet Based Mass cutomizatio -n-	Product Knowledge Vendor Usability of website	Consumer Confusion	(-)ve (-)ve	None	Survey (PLS,SEM)

#	Author, year and country	Sampling	Sample type	Product	DV	IV	Proposesd Relationship	Mediator	Analysis
18	Ismail & Spinelli (UK) (2012)	Convenient Sampling n=250	Undergrad Students		Brand Love Brand Personality Brand Image	Word of Mouth	(+)ve (+)ve (+)ve	None	Survey (Path Analysis, SEM)
19	Loureiro Ruediger & (2012) Demetris (Portugal)	Convenient Sampling n=374	Purchasers of Toyota, Ford and Renault Car	Car Brands	Brand Love Brand Attachment Self Expressive Brand	Brand Loyalty	(+)ve (+)ve (+)ve	Affective Commitment Trust	Survey (Multigrou p SEM,T- tests)
20	Sondoh et al.(Malaysia) (2007)	Convenient Sampling n=97	Females	Cosmetics	Brand Image Benefits	Satisfaction Loyalty Intentions	(+)ve(+)ve	None	Survey (Regression Analysis)
21	Walgren, Ruble & Donthu (USA) (1995)	Convenient Sampling n=90	Volunteer graduate and undergraduat e students	Hotels Household cleansers	Brand Equity	Consumer Preference Purchase Intention	(+)ve (+)ve	None	Survey (Regression Analysis & Conjoint Analysis)
22	Loken, Ross & Hinkle (USA) (1986)	n=112			Consumer confusion of origin of brand	Physical similarities of brand	(+)ve	None	Experiment (Regression & Cluster Analysis)
23	Kennings (Germany) (2015)	n=516	Households	Food Products	Non-purchasing behavior Need for price stability Need for brands Need for information Need for quality certifications Need for simplicity in shopping Call for Government regulations	Consumer	(+)ve (+)ve (+)ve (+)ve (+)ve (+)ve	None	Survey (Regression and t-tests)

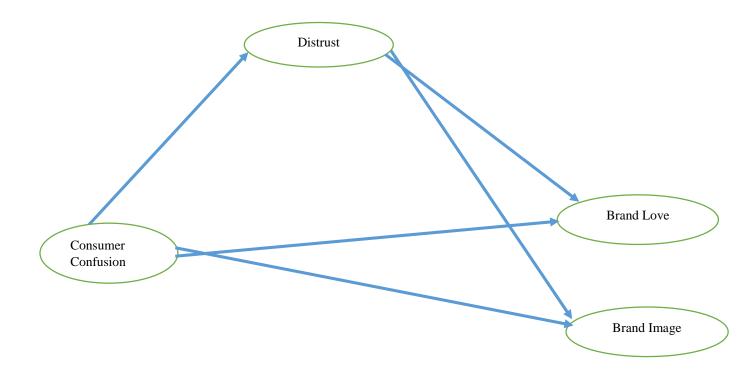


Fig. 2 Theoretical Framework

## 3. Research Design

#### 3.1. Introduction

This section of the thesis discusses the methodology for carrying out the proposed research and the philosophical concerns embedded in it. This section outlines the research strategy, sampling technique, method for collecting data, and data analysis techniques in detail. The aim of this research is to explain the relationship between consumer confusion, and brand love and brand image in high involvement situation. Also, this research seeks to find out whether or not distrust acts as a mediating variable between the construct of confusion, and brand image and brand love. To answer the research questions of this thesis quantitative research strategy is adopted. Since, this research aims to test the hypotheses deduced from the existing and past body of the literature, it follows a deductive approach to arrive at the conclusion. Pen and paper survey method was utilized to collect data. Survey questionnaire measured consumer confusion by using the scale developed by Walsh, Hennig-Thurau, & Mitchell (2007). Rest of the constructs were also measured by well adopted scales used in many previous studies. Data was collected at a single point in time, making it a cross-sectional study. The collected data was analyzed using confirmatory factor analysis and path analysis via application of structural equation modeling (SEM) technique in AMOS software and percentile Bootstrap test in SPSS software.

#### 3.2 Research Approach

Guba & Lincoln (1994) have advised that when it comes to research strategy, the question of research paradigm holds primary position, and thereafter comes the question of method to collect data. A paradigm, in simple words, refers to the "worldview" a person has in mind about the world around him/her based on the observations, facts and well-argued beliefs about the world

around. Research paradigm in any discipline is defined as a set of practices and individual beliefs which dominate the researchers' and scientists' decision of what to study? How to carry out the research? And how to analyze and interpret the findings of a research (Bryman, 1988). Guba & Lincoln (1994) have defined paradigm as, "the basic belief system or worldview that guides the investigator, not only in choice of methods but also in ontologically and epistemologically fundamental ways." Consistent with the views discussed above this research also outlines its methodology parallel with the philosophical concerns about the "worldview" and "gathering of and creation of knowledge" which are discussed in the following pages.

# 3.2.1 Ontological and Epistemological Concerns

Research methodology is not only chosen by focusing on the most appropriate way to answer the research question but also guided by the philosophical assumptions attached to it (Guba & Lincoln, 1994; Wahyuni, 2012; Lowhorn, 2007). Every research possesses two philosophical aspects; epistemology and ontology (Lincoln and Guba, 1994; Atieno, 2009; Tuli, 2011; Howe & Eisenhart, 1990; Harwell; 2011; Wahyuni, 2012; Lowhorn, 2007; Newman, 1998). Epistemology questions about knowledge, knowing how do we know about things we know? What qualifies as knowledge? How to gather knowledge? (Tuli, 2011). Ontology questions about the world around us. Ontology leads us to reflect upon the reality of world in which we live. It poses the question about the nature of the reality i.e. what is the nature of world around us? What do we consider as reality from the world around us? How do we perceive what is reality? (Tuli, 2011; Johnson 2001)

The methodology of research needs to be inspired by one of the two research paradigms under the philosophy of epistemology and ontology; positivism and interpretivism (Krauss, 2005; Lincoln and Guba, 1994; Tuli, 2010; Howe & Eisenhart, 1990; Harwell; 2011; Wahyuni, 2012; Lowhorn, 2007). The positivist paradigm has its roots in natural science's methods of research

and favors the quantification of data to achieve precise result to better predict or explain the relationship between the social entities (Howe & Eisenhart, 1990; Tuli, 2011; Johnson, 2001; Harwell; 2011). Positivism is also known as "quantitative research paradigm" and "scientific research paradigm" (Bryman & Bell, 2011; Atieno, 2009; Harwell, 2011; Newman, 1998; Johnson, 2001). Positivism also entails the deductive principle. The effort to test the proposed hypotheses about the relationship between the variables in a research is central to the positivistic approach (Guba & Lincoln, 1994; Bryman & Bell, 2011; Johnson 2001; Harwell, 2011)

On the other hand, interprativist paradigm rejects the idea of data quantification to predict the behavior of social entities, and view social science research as a distinctive phenomenon from natural science research (Bryman & Bell, 2011; Howe & Eisenhart, 1990; Tuli, 2011; Harwell, 2011). Interpretive paradigm; also known as "qualitative research paradigm" and "socio-anthropological research paradigm" emphasizes on seeking full explanation of a unique social phenomenon, assuming that it is impossible to analyze any social phenomenon without accounting for the reality as it is experienced by the social entities that are subjects or respondents in a research study (Tuli, 2011; Atieno, 2009; Harwell 2011).

Interpretive researchers argue that the study of complex social phenomenon requires the use of non-scientific methods of understanding the meaning of the phenomena experienced by the social entity itself (Howe & Eisenhart, 1990; Tuli, 2010; Atieno, 2009; Ponterotto, 2005). Interpretivist paradigm does not allow to isolate the social entities from their reality, and focused on their experience of reality (Howe & Eisenhart, 1990). According to the interpretive paradigm the individuals make their own reality from their lived experiences and everyone has a different view of reality around him/her. Since the social reality varies for individuals, therefore understanding the question of why humans do what they are doing? Why they act in a certain way?

Why do they behave like they do? becomes complex. In short, complex social behavior is impossible to understand by the application of natural science methods (Caporaso, 1995; Ponterotto, 2005; Tuli, 2010; Atieno, 2009). Based on this view, interpretive researchers adopt methods which do not involve quantification. Instead they utilize the method of interview, focus group discussion and participant observation to understand a social phenomenon (Williams, 2011). Interpretivist approach entails qualitative research strategy which is necessary to adopt when the researcher seeks to understand a complex social phenomena rather than seeks to test the assumptions about a social phenomenon (Caporaso, 1995; Ponterotto, 2005; Tuli, 2010; Atieno, 2009; Harwell, 2011).

This research does not seek to answer the question of why do consumers get confuse while shopping? This research rather intends to test the proposed hypotheses about a consumption related phenomenon to explain the relationship between the variables and to better predict the effects of confusion on some specific consumption outcomes. Therefore, this research follows quantitative methodology hence, falls in the paradigm of positivism.

#### **3.3. Method**

#### 3.3.1 Sample Research Tool

Survey method, with questionnaire, is commonly used in quantitative research design. Survey method is preferred for the following reasons; a) it enables the researcher to collect a significant amount of information from a large sample at one point in time, b) this method of data collection is economical to carry out, c) survey provides respondents with anonymity hence the probability of receiving accurate and honest responses in this method is comparatively higher than the interview method, and d) the quantitative data obtained as the result of survey enables researcher to apply various statistical techniques to analyze the data.

This study aims to explain the relationship between the variables, hence, making it an explanatory study. Survey method is commonly used for carrying out exploratory and descriptive research but Saunders et al. (2009) have proposed that survey method could also be used "to suggest possible reasons for particular relationships between variables and to produce models of these relationships." Bryman (2006) also suggests that only a cross-sectional survey design, can predict and produce possible relationships between the variables. This research follows deductive approach and aims to test the hypotheses proposed in Table 2 about the relationship between consumer confusion, and brand love and brand image. Therefore, a survey method is found to be appropriate to carry out this research. Survey was conducted using non-probability convenient sampling technique. Data was collected at one point it time hence, making it a cross-sectional survey. In addition to the constructs of study, survey questionnaire asked for respondents' gender and age. A pretest of questionnaire with 30 individuals was conducted before administering it to the sample.

Hair et al. (1998) proposed that for each independent variable the number of responses should not be less than 5. In order to achieve results not restricted to the sample type, the desired ratio is 15-20 responses per variable. Survey method was utilized to carry out this research, using questionnaire as a tool of research to collect data from a sample of 350 undergraduate and post-graduate students. Majority of previous consumer confusion studies, for some practical reasons, have predominantly used student samples in spite of being aware of the fact that students differ from other consumers in having different attitudes and behaviors (Mitchell, Walsh, & Yamin 2010; Huang, 2017). Most importantly the decision about taking student sample was made in consideration with the previous studies of consumer confusion, many of which have taken students as a sample from population of study. The use of student sample in this thesis can be justified by

the fact that majority of previous empirical studies on consumer confusion have used student sample. In this way this thesis increases the likelihood of comparison of its findings with the findings of previous studies on confusion.

## 3.3.2 Product Category

In this era of rapid technological advances and production of highly advanced electronic products consumers are highly involved in purchase of electronic goods and are more likely to get confused while shopping for complex products such as electronics and electronic gadgets like mobile phones (Turnbull, et al., 2000) and computers (Leek and Kun, 2006). Wang and Shukla (2013) suggest that smart phones are complex products because of the various features which come with a single model of smartphone. Therefore, Wang and Shukla (2013) propose that consumers are most likely to suffer from confusion while making purchase decision of a smartphone. Mitchell et al. (2010) argue that consumers in high involvement situation are more prone to brand similarity. Moreover, Mitchell et al. (2010) assigned 10 marketing students with a task of classifying 25 different products into the categories of high and low involvement products, and found that mobile phone was consistently classified as a high involvement product. This thesis carried out survey for mobile phone as a product category as it is usually bought with high level of product involvement.

The literature on consumer confusion and consumer brand relationship shows that the researchers have collected data for a particular product category or a particular brand to which consumer can refer to easily. This study selected mobile phones as product category to collect data, because in the light of literature mobile phones are generally bought with high level of product involvement.

## 3.3.3 Measurement and scales

This study adopts the well-developed scales from the literature to measure the constructs.

Below are the scales that have been used to operationalize the constructs.

**Consumer Confusion:** Tri dimensional, 11-items scale developed by Walsh, Hennig-Thurau, & Mitchell (2007).

**Brand Love:** Tri-dimensional 11-items scale developed by Keh, Pang and Peng (2007) and adopted by Jun et al. (2009).

**Brand Image:** Based on attributes, 3-items scale developed by Low & Lamb (2000)

**Consumer Distrust:** 4-items scale developed by Chaudhuri & Holbrook (2001)

Five points Likert Scale was used to measure the level of agreeableness of respondents to 29 statements in questionnaire which measured the constructs studied in this thesis. Following numbers were assigned to the different levels of agreeableness on five points Likert Scale (1= strongly disagree to 5= strongly agree.)

 Table 4 Sample items of Questionnaire

Sr.#	Construct	Sample items
1	Similarity Confusion	"Most brands are very similar and are therefore hard to distinguish."
		"Some brands look so similar that it is uncertain whether they are made by the same manufacturer or not."
2	Information Overload  Confusion	"When buying a product I rarely feel sufficiently informed."
3	Ambiguity Confusion	"I do not always know exactly which products meet my needs best."
		"When purchasing certain products, such as a computer I feel uncertain as to product features that are particularly important for me."
4	Consumer Distrust	"In general, I trust the manufacturers of the product I buy."
5	Brand Love	"I would rather own this brand than any other brand."  "I will continue to buy this brand when I need the same product."

(Note: Full items are given in questionnaire in annexure)

## 3.4. Data Analysis

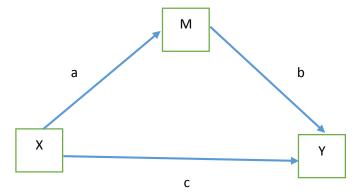
#### 3.4.1 Introduction

This thesis proposes to begin its analysis by performing confirmatory factor analysis (CFA) on data collected using maximum liklehood estimation, to ensure that only those items with factor loading equal to and greater than 0.5 are retained for final analysis of model and the structural hypotheses of this thesis. A measurement model was analyzed to check the reliability and validity of the constructs extracted through CFA and model fit indexes were reported. Afterwards, this thesis employed structural equation modeling (SEM) technique to analyze the structural paths among latent constructs proposed in theoretical framework.

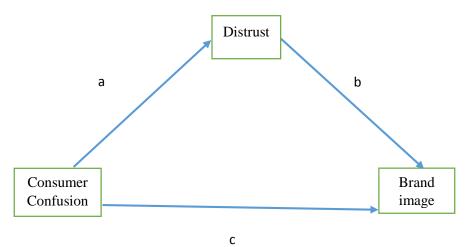
Structural equation modelling (SEM) is a "multivariate statistical approach" which allows a researcher to estimate the relationships exist between multiple independent and dependent latent constructs simultaneously (Hair et al., 1998; Hair, Ringle, & Sarstedt, 2011). Moreover, SEM also assists researchers in analyzing the measurement model, and structural model at the same time. (Gefen, Straub, & Boudreau, 2000; Tabachnick & Fidell, 2001). Therefore, the application of SEM analytical technique have become very popular in the statistical analysis of data particularly in management and marketing research (Hair, Ringle, & Sarstedt, 2011). This thesis studies the relationship between two latent dependent constructs and one latent independent construct, with a mediator variable between them, and therefore structural equation modelling technique appears to be most suitable for the analysis of structural paths of theoretical model shown in Fig. 2.

#### 3.5. Mediation Model

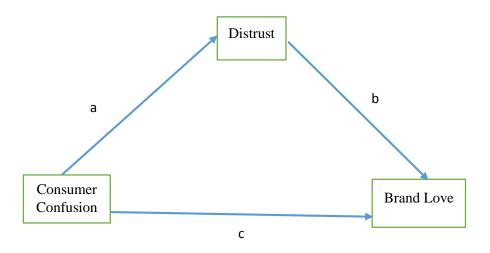
The study of mediation models is very common in psychology and organizational behavior research (Hayes, 2004; Taylor, MacKinnon & Tein, 2008). Mediation model involves a mediator variable which explains the causal relationship between variables (Shrout & Bolger, 2002). Mediation model explains the unobserved effect of independent variable (X) on dependent variable (Y) in the presence of a mediator variable. The mediator variable, denoted by M, is an intervening variable between X and Y which is responsible for variation in outcome variable. Mediator variable transfers the impact of X on Y where X is not responsible for producing any effect on Y directly (Taylor, MacKinnon & Tein, 2008). This model postulates that X indirectly causes a change in Y through a mediator variable. A simple mediation model is depicted in Fig. 3. Path a and b indicates an indirect effect and path c indicates direct effect. This thesis proposes distrust (M) as a mediator variable between consumer confusion (X) and two different dependent variables brand love (Y) and brand image (Y). Therefore, two mediation models are analyzed in this thesis. In order to analyze a mediation model SEM was conducted to analyze each structural path of mediation models. Fig. 4 and Fig. 5 depicts the mediation models of this thesis.



**Fig. 3** A simple mediation model



**Fig. 4** Mediation model 1



**Fig. 5** Mediation model 2

## 3.5.1 Analysis of Mediation Models

A simple mediation model in marketing and consumer research is analyzed by using the mediation approach developed Baron & Kenny (1986). This approach is frequently and most commonly used by marketing researchers. Baron & Kenny's (1986) approach is widely used by social science researchers to analyze mediation model. Since 1986 their paper has received 74,988 citations in journal articles. Baron & Kenny's (1986) approach of mediation analysis involves three steps and in every step a regression analysis is performed. In first step mediator variable (M) is regressed on independent variable (X), in second step dependent variable (Y) is regressed on independent variable and in the last step Y is regressed on both M and X. For mediation to exist Baron & Kenny's (1986) approach also known as "causal steps approach" requires all three regression equations to produce significant results. Baron & Kenny (1986) impose a constrain on their approach by making it absolutely necessary that X should be a significant predictor of Y. They suggest that if X does not significantly predict Y, then the researcher should abandon the research because the mediation analysis cannot be performed on the proposed mediation model. Therefore, in order to perform mediation analysis according to Baron and Kenny's (1986) approach X and Y should share a significant relationship with each other. Fritz & MacKinnon (2007) reported that majority of studies apply structural equation modelling (SEM) technique to analyze the mediation effect as it simultaneously runs regression for direct and indirect paths in mediation model.

Full mediation exists as per this approach if the relationship between X and Y in step 3 (regression path c) becomes insignificant with the inclusion of M in regression equation. If the X persists to exist as a significant predictor of Y after the inclusion of M in the model, but the direct effect reduces in its size of beta (coefficient of regression) then according to this approach M

partially mediates the relationship between X and Y. Baron & Kenny (1986) recommend to perform Sobel z test which indicates the significance of mediated effect. Sobel test produces a z score which tests the statistical significance of difference between total effect (indirect effect plus direct effect of X on Y in mediation model) and direct effect, and in this way it measures the significance of indirect effect (a x b). This test uses the coefficients of indirect paths a & b, and their standard errors to calculate the significance of indirect effect.

# 3.5.2. Critique on Baron & Kenny's (1986) approach

The necessary condition to be met for the application of Baron & Kenny's (1986) approach forces researchers to abandon their research. In many cases statistical analysis shows that a significant relationship between X and Y in proposed model does not exist at all which makes researchers to drop their research on mediation model immediately. Because this situation suggests that no mediator effect exists in the model. Since early 2000's many researchers have critically reviewed Baron & Kenny (1986) approach, and have come to the conclusion that this approach should not be used by researchers to detect mediation effect because of its two major flaws: 1) the compulsory condition that X & Y must share a significant relationship, 2) Issue related to Sobel test and its statistical power.

Shrout & Bolger (2002) suggest that the requirement of statistical test of association between X and Y as per Baron & Kenny's (1986) approach should not be of chief concern where only indirect relationship is hypothesized, and when a researcher has a fair idea that there is a little possibility for direct relationship to exist. MacKinnon et al. (2002) argued that Baron & Kenny (1986) approach has low statistical power as Sobel test involves a product of two regression coefficients which happens to be not normal most of the time. MacKinnon et al. (2002) conducted Monte Carlo simulation study and compared 14 different methods used by researchers to detect

mediation effect and found that causal step method has very low statistical power. MacKinnon, Lockwood, & Williams (2004) conducted Monte Carlo simulation study to test the significance of confidence interval of indirect effect measured by the application of Sobel test and found that the distribution of confidence interval in Sobel test is not normal which increases the rate of Type 1 error. MacKinnon, Lockwood, & Williams (2004) also found that percentile bootstrap test controls for Type 1 error rate by resampling the distribution many times and should be used to analyze mediated effect. Later on Fritz & MacKinnon (2009) also found that Sobel test has very low statistical power. Taylor, MacKinnon, & Tein (2008) reported that the significance of indirect effect is not rightly determined by Sobel test and bootstrap method should be preferred over causal step approach and Sobel test as it controls for Type 1 error rate.

Preacher & Hayes (2004) after empirically testing different methods to analyze significance of indirect effect in mediation models found that percentile bootstrap method is most appropriate to analyze mediation model. Preacher & Hayes (2004) developed Syntax to perform percentile bootstrap test to analyze mediation model in SPSS and SAS software. Their syntax performs all regressions of causal-step, measures the significance of indirect effect by bootstrap test. MacKinnon & Fairchild (2009) emphasize that only indirect effect is needed to be analyzed in a mediation model, a method which is very common in psychology research. Hayes (2009) pointed out that advancements in methods to analyze mediation model have repealed Baron & Kenny's (1986) approach and Sobel test. Therefore, this thesis analyzes its proposed mediation models by new approach developed by Zhao, Lynch & Chen (2010), and tests the significance of indirect effect by application of percentile bootstrap method in SPSS software using the syntax developed by Preacher & Hayes (2004).

## 3.6. Approach for Mediation Analysis

This thesis analyzes its proposed mediation models by new approach developed by Zhao, Lynch & Chen (2010). Zhao, Lynch & Chen (2010) argue that the Baron & Kenny's (1986) necessary condition for mediation to exist does not make any sense. Zhao, Lynch & Chen (2010) pointed out that consumer research lacks technical literature to explain that mediation model is analyzed for indirect effect only. But, in the discipline of psychology researchers have come up with the technical literature because mediation models are very frequently studied in psychology research. Zhao, Lynch & Chen (2010) present the crux of technical explanation, behind the rejection of Baron & Kenny's (1986) approach, in a simpler way to comprehend. The authors argue that when a researcher develops a hypothesis about mediation model it does not state about the existence of a direct relationship between the X and Y. Hence, the direct relationship between X and Y is never hypothesized in the first place, and often lacks theoretical background. Mediation model proposes that the relationship between X and Y exists only in the presence of a mediator variable. Baron & Kenny (1986) propose that full mediation exists only when the relationship between X and Y ceases to exist after the inclusion of M in the model, and becomes insignificant. Baron & Kenny's (1986) approach for full mediation confirms that the mediation only involves indirect effect. Zhao, Lynch & Chen (2010) question this practice, and argue that when only indirect effect is required to prove full mediation than in what sense direct relationship becomes of any use to observe mediation model? It simply does not make any sense theoretically, and analytically as well. As per Zhao, Lynch & Chen (2010) approach direct effect is not required to analyze mediated effect. Their approach is discussed in detail in chapter 4.

## 4. Results

### 4.1 Pre-test

A pretest of survey questionnaire with 30 undergraduate (fourth year) students was conducted before administering the questionnaire to a convenient sample of 350 post graduate and undergraduate students of Lahore School of Economics. The participants in the pre-test volunteered to participate and agreed to spare 30 minutes for this purpose. After filling out the questionnaire the participants were asked about any difficulty they had in understanding or attempting the questionnaire. Some vagueness in few statements was pointed out by participants, and they also provide their feedback on the choice of product category. Finally, the survey was carried out using mobile phone as a product category.

# 4.1.1 Administration procedure

The questionnaire asked respondents to select the brand they have been buying from the available brand names enlisted in the questionnaire. Following mobile phone brands were given in the questionnaire so the respondents could select a brand in order to respond to questionnaire. All these brands are available to buy in the markets of Lahore city.

## Sony Apple Q-Mobile Samsung Huawei Nokia HTC Other

Before starting to answer the questionnaire, respondents were instructed to recall the mobile phone brand they have been buying the most or to think about the very recent purchase of a mobile phone. Afterwards, respondents were asked to fill out the questionnaire with regard to brand that they have chosen.

# 4.2 Data and Sample statistics

Out of 350 questionnaires returned by students 291, responses were found usable for the final analysis. The responses in the final analysis had no missing value. Data was checked for outliers and no outlier was found. The fact that no outlier exists in data is supported by measurement of responses on five-points Likert scale where we know the lowest response could be 1 and highest could be 5. Therefore, logically there is not the slightest chance of getting extreme values in data. Table 4 shows the descriptive statistics of latent constructs.

**Table 4 Descriptive Statistics of Latent Constructs** 

Latent Constructs	Mean	Std. Deviation
Distrust	2.2	0.92
Brand Image	4	0.82
Consumer Confusion	3	0.60
<b>Brand Love</b>	3.4	0.78

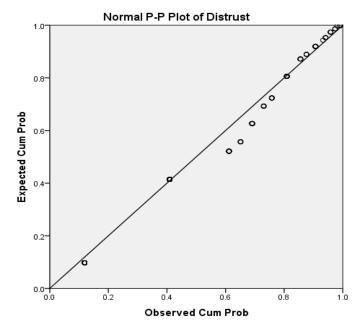
Table 5 in the appendix 1 shows frequency of gender of respondents. Table 6 in the appendix 2 shows frequency of age of respondents. Analysis of gender shows that 143 respondents were female and 148 were male by gender. Respondents of age 22 constitute 28.9%, of age 23 constitute 23.7%, of age 21 constitute 23%, of age 24 constitute 7.9% and of 25 constitute 5.5% of the total sample population. Frequency of other numbers of age is shown in Table 6 in appendix.

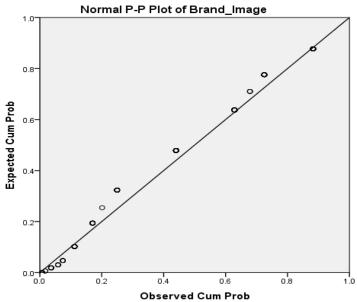
# 4.3 Frequency Distribution of Data

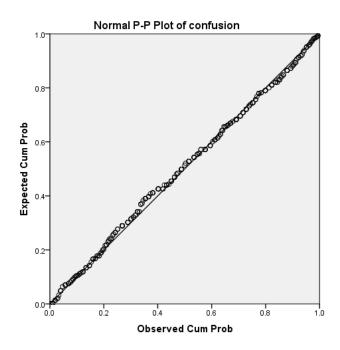
Normal distribution of data is an essential assumption to be satisfied before commencing any sort of statistical analysis on data except for non-parametric tests. It is imperative to check for the normality before conducting confirmatory factor analysis and path analysis (Schreiber et al., 2006; Brown & Moore, 2012). Moreover, it has become conventional practice in statistics to rely on central limit theorem which declares that frequency distribution of data tends to be fairly normal for sample size of 30 or above. The sample size of this thesis (n=291) is large enough to assume that the distribution of data is normal.

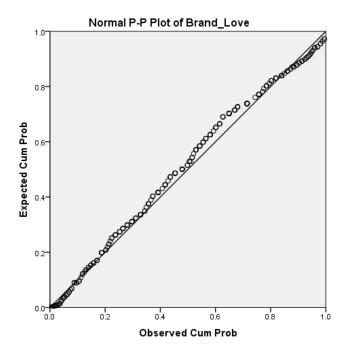
Normality tests such as K-S test and Shapiro-Wilk test are generally performed on data to test the null hypothesis about distribution of data. If these test produce an insignificant p-value it suggests that the null hypothesis: which states that the distribution of data is not significantly different from normal distribution is accepted, and distribution is normal. Many authors suggest that in large sample sizes normality tests (K-S test and Shapiro-Wilk test) tend to produce significant values because of the small size of standard errors and therefore analysis about normality should be made and interpret in conjunction to the normality plots such as P-P plot or Q-Q plot (Field, 2013).

However, to satisfy the assumption of normal distribution P-P plot for each variable of this thesis was constructed in SPSS software. P-P Plots of data are shown in the following pages. We can observe from the plots that P-P plot of confusion and brand love forms a straight line with almost all observations lying diagonally on straight line which indicates normality of their frequency distribution. The P-P plot of brand image and distrust seems fairly normal with very few deviations and almost symmetrical straight line.







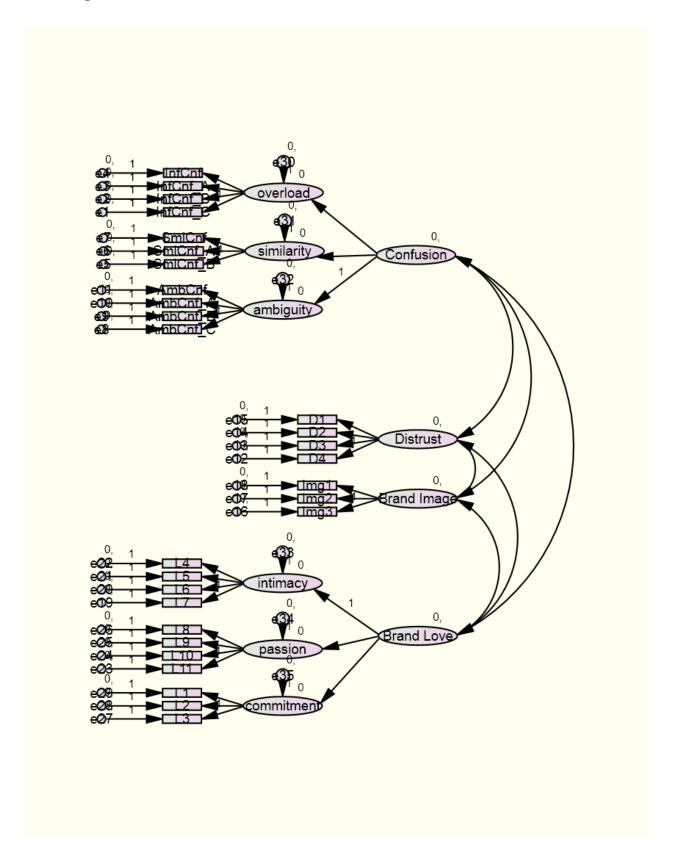


## 4.4. Confirmatory Factor Analysis

Confirmatory factor Analysis (CFA) is a statistical technique used to analyze relationship between unobserved and observed variables based on theoretical background of inter-relationship among the variables (Schreiber et al., 2006). Observed variables are usually measureable and most common terminologies for these variables include indicator, or measured variables. Unobserved variables are not directly measurable and most common terminologies for these variables include factor, latent factor, and construct (Schreiber et al., 2006). A factor is composed of many observed variables, in other words a factor has an impact on the observed variables and all the observed variables correlate with each other (Hoyle, 2000; Brown & Moore, 2012).

CFA is conducted to estimate population covariance matrix of a model which involves latent factors. CFA compares the observed population covariance matrix with the hypothesized or estimated covariance matrix and gives the researcher an output which shows how well the covariance matrix from hypothesized model fits with the actual covariance matrix found in the data (Schreiber et al., 2006). A researcher wants minimum difference between estimated model and observed model to further perform statistical analysis on data. CFA tests the theoretical interrelationship between factors, and between the indicators and factor. In this way it also tests the reliability and validity of latent variables (Hoyle, 2000; Brown and Moore, 2012). Therefore, the CFA model of observed and unobserved variables is also known as measurement model as it measures the covariance among the latent variables and correlation among observed and unobserved variables. This thesis began its statistical analysis of data by conducting CFA on data to confirm the reliability and validity of latent variables. The measurement model as shown in Fig. 5 was constructed in AMOS software based on the theoretical development of constructs of the study

Fig. 5 Measurement Model with all the latent variables studied in this thesis



#### 4.4.1 Results of CFA

CFA was performed using maximum likelihood estimation method. Measurement model was assessed (as shown in Fig. 5) using goodness-of-fit indicators. According to Hoyle (2000) goodness-of-fit indexes indicate whether or not the parameters estimates of the model are able to reproduce the observed relationships of latent variables in sample data. Results of CFA produced the following values of fit indexes: chi-square = 713.775, degrees of freedom = 365, probability level = .000, CMIN/DF (ratio of chi square to degree of freedom) = 1.956, Normed fit index (NF1) = 0.833 Tucker-Lewis index (TL1) =0.899, Incremental fit index (IFI) =0.911, Comparative fit index (CFI) = 0.910, Root mean square error of approximation (RMSEA) =0.057. Table 7 in the following pages shows the values of fit indexes of measurement model produced by AMOS software as an output of CFA.

Analysis was performed one time only, and no modification was made to the model. Schreiber et al. (2006) provides an extensive review on reporting fit indexes of CFA and structural equation modelling (SEM) analysis, and suggest that in general the indexes of TLI, CFI and RMSEA are sufficient to conclude fit between the estimates generated by model and observed relationship among variables in data. These authors also provide cutoff criteria of fit indexes and conclude that no value less than 0.90 is acceptable for TLI and CF1 index. Any value above 0.90 is acceptable for TLI and CF1 index, and values greater than 0.95 are very good and desired by researchers. Cutoff value for RMSEA index is less than 0.06 to 0.08. The value of TLI index as a result of CFA is approximately 0.9 while the values of RMSEA and CFI indexes are also good.

Schreiber et al. (2006) also conclude that the ratio of chi square to degree of freedom (CMIN/DF) is the most general and important index to determine the fit of estimated model. Similar to critical value of chi square this ratio tests the null hypothesis that the variance and co-

variance matrices of estimated model and population sample are not significantly different from each other. The cutoff value of this index is less than or equal to 2 or 3 which means any value in the range of 1-3 is acceptable and indicates that the model is a good fit of sample observations. Any value of chi square to degree of freedom ratio (CMIN/DF) in this range verifies the acceptance of null hypothesis. CFA produced CMIN/DF value of 1.956 for measurement model of this thesis thus the null hypothesis is accepted, which ultimately relieves us from worrying about the value of TLI index.

**Table 7 Model Fit Summary (Measurement Model)** 

Fit Index	Cutoff value	Model
Fit Index	(Schreiber et al., 2006)	Estimate
CMIN/DF	≤ 2 - 3	1.956
TLI	≥ 0.95	0.899
NFI	≥ 0.95	0833
CFI	≥ 0.95	0.910
IFI	≥ 0.95	0.911
RMSEA	< 0.06 - 0.08	0.057

# 4.4.2 Reliability Analysis

Brown & Moore (2012) pointed out that the major reason relating to perform CFA is to draw conclusion about the reliability and validity of the latent constructs. CFA produced significant regression weights (factor loadings) of indicators measuring the latent factor. Table 9 shows the factor loadings of all the items. CFA produced significant correlation and covariance among latent constructs which are show in Table 10 and Table 11. Table 10 shows the covariance matrix and Table 11 shows correlation matrix of latent constructs. Reliability and validity of variables was then measured using the values of factor loadings of indicators and correlations among the variables in Microsoft Excel spreadsheet made by Michael Korchia (Professor of Marketing, Bordeaux Management School) for calculating reliability and validity.

Fornell and Larcker (1981) also suggest that a latent construct holds convergent validity if it produces the value of average variance extracted (AVE) greater than 0.5 and holds discriminant validity if its value of average shared variance (ASV) is less than AVE. All the latent constructs have yielded AVE value greater than 0.5 and ASV value lesser than AVE therefore, all the latent constructs of this research hold convergent validity and discriminant validity. Reliability of scales used to operationalize the constructs was tested by calculating the value of Cronbach's alpha's for each variable. Scales adopted from literature to operationalize constructs in this thesis turned out to be reliable, having Cronbach's alpha's value greater than 0.7. Table 8 depicts the calculated reliability and validity of the constructs. Table 9 shows the factor loadings of items of constructs.

 Table 8
 Reliability and Validity of Latent Constructs

Sr. No.	Variable	No. of Items	Convergent Validity (AVE)	Discriminant Validity (ASV)	Cronbach's Alpha
1	Distrust	4	0.800	0.076	0.943
2	Consumer Confusion	11	0.776	0.022	0.948
3	Brand Image	3	0.657	0.121	0.926
4	Brand Love	11	0.683	0.109	0.972

 Table 9
 Factor Loadings of Items of Constructs (Measurement Model)

Items	Factors	<b>Latent Construct</b>	Factor Loading
I do not always know exactly which model of mobile phone meet my needs best	Overload confusion		.627
There are so many brands of mobile phone available in the market to choose from that I sometime feel confused.	Overload confusion	Consumer Confusion	.481
Owing to the host of stores it is sometimes difficult to decide where to shop for mobile phone	Overload confusion		.759
Most models of mobile phone are very similar and therefore it is hard to distinguish between similar models offered by many brands.	Overload confusion		.709
Owing to the great similarity of many mobile phones among different brands it is often difficult to detect new model of mobile phone.	Similarity confusion		.692
Some models of mobile phone look so similar that it is uncertain whether they are made by the same manufacturer/brand or not.	Similarity confusion		.713
Items	Factors		Factor Loading

Items	Factors		Factor Loading
This is not an honest brand.	Distrust	Distrust	.918
I do not rely on this brand.	Distrust	D:044	.733
I do not trust this brand.	Distrust		.731
mobile phone, I need the help of sales personnel to understand differences between different models and brands of mobile phones.	Ambiguity confusion		.591
When purchasing a mobile phone I feel uncertain as to product features that are particularly important for me.  When purchasing a	Ambiguity confusion		.601
When buying a mobile phone I rarely feel sufficiently informed.	Ambiguity confusion		.558
Products such as mobile phone often have so many features that a comparison of different models offered by different brands is barely possible.	Ambiguity confusion		.546
Sometimes I want to buy a mobile phone I have seen in an advertisement, but I cannot identify it clearly between the similar mobile phones offered by many different brands.	Similarity confusion		.617

This brand is not	Distrust		.836
safe to buy.	D 11		<b>7</b> 01
Reliable	Brand Image		.721
Durable	Brand Image	Brand Image	.788
Useful	Brand Image		.911
I received considerable emotional support from this brand of mobile phone.	Intimacy		.671
My relationship with the chosen brand is intimate.	Intimacy		.485
There is something special about my relationship with this brand of mobile phone.	Intimacy		.813
I would rather own this brand of mobile phone than any other brand.	Intimacy	Brand Love	.808
I cannot imagine another brand of the mobile phone making me as happy as this brand.	Passion		.808
I find myself thinking about this brand of mobile phone frequently during the day.	Passion		.826
I have the impulse to buy from this brand at the sight of this brand of mobile phone.	Passion		.781
I will continue to buy this brand when I need the mobile phone again.	Passion		.740
I am willing to recommend this brand of mobile phone to my friends.	Commitment		.814
Items	Factors		Factor Loading

I feel that I can really trust this brand of mobile phone.	Commitment	.845
This brand is my first choice when I buy the mobile phone.	Commitment	.757

**Table 10 Covariance Matrix (Latent Constructs)** 

	Distrust	Brand Love	Brand Image	Confusion
Distrust	1	-0.140	-0.159	0.096
Brand Love	-0.140	1	0.268	-0.022
Brand Image	-0.159	0.268	1	0.003
Confusion	0.096	-0.022	0.003	1

**Table 11 Correlation Matrix (Latent Constructs)** 

	Distrust	Brand Love	Brand Image	Confusion
Distrust	1	-0.253	-0.318	0.254
Brand Love	-0.253	1	0.512	-0.056
Brand Image	-0.318	0.512	1	0.008
Confusion	0.254	-0.056	0.008	1

# 4.5. Results of Structural Equation Modeling

Structural equation modeling (SEM) is a statistical technique which simultaneously performs multiple regressions on data in a given model (Ringle, & Sarstedt, 2011). SEM is an extension of CFA which measures the relationship between independent and dependent latent variables. Similar to multiple regression it gives us the estimated beta values of variables with significance level. Different terminology is ascribed to dependent and dependent variables in SEM. Independent variables are termed as exogenous variables and dependent variables are termed as endogenous variables in SEM model. Distrust, brand image and brand love are endogenous variables and consumer confusion is an exogenous variable in SEM model of this thesis, and this model was constructed and analyzed in AMOS software as shown in Fig. 6

The results of structural model shows it has a good fit. Chi square to degree of freedom ratio of structural model has a value of 2.089. Table 12 in the following pages depicts the fit indexes of structural model. Table 13 in the following pages shows the regression results of five structural paths of structural model.

Fig. 6 Structural model showing direct and indirect paths between exogenous and endogenous variables

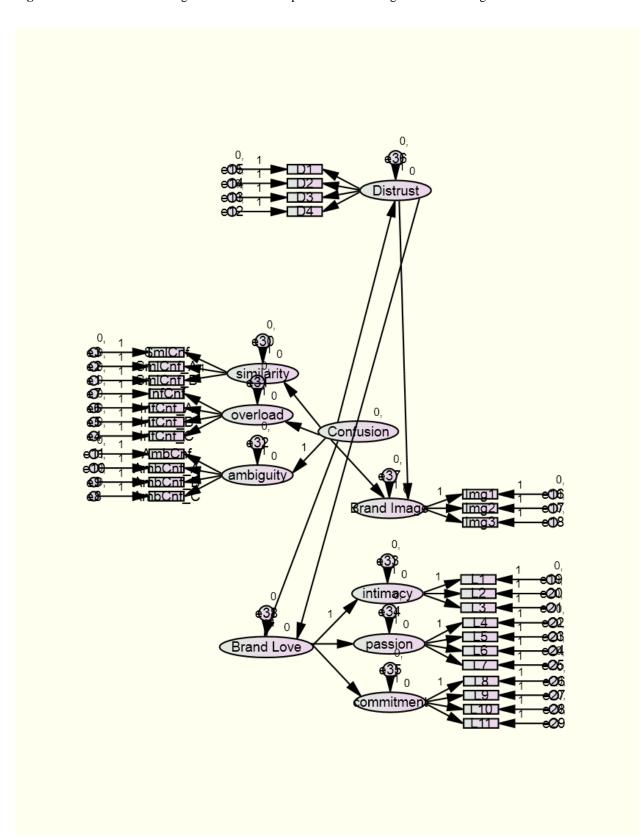


Table 12 Model Fit Summary (Structural Model)

Fit Index	Cutoff value	Model
TH IIIdex	(Schreiber et al., 2006)	Estimate
CMIN/DF	≤2-3	2.089
TLI	≥ 0.95	0.885
NFI	≥ 0.95	0.821
CFI	≥ 0.95	0.897
IFI	≥ 0.95	0.898
RMSEA	< 0.06 - 0.08	0.061

 Table 13 Regression Results of Structural Paths (Structural Model)

Paths	Beta	t- vale	p-value
Distrust←Confusion	0.358	3.345	***
Brand Love←Confusion	0.034	0.4	0.692
Brand Love←Distrust	-0.217	-3.616	***
Brand Image←Confusion	0.175	1.4	0.162
Brand Image←Distrust	-0.445	-5.174	***

(\*\*\* indicates a p- value of less than 0.001)

## 4.6 Analysis Approach and Interpretation of Mediation Models

This thesis adopts mediation approach developed by Zhao, Lynch & Chen (2010) to analyze and interpret the results of mediation models of this thesis. Mediation model consists of three paths as previously shown in Fig. 2. Path (a x b) are Indirect paths, and signify the effect to be mediated. Zhao, Lynch & Chen (2010) identify following three typologies of mediation which form the decision criteria about the existence of mediated effect when concluding the results of a mediation model. 1) When the regression steps produce significant direct effect and indirect effect (a x b), and these effects exhibit same direction of relationship this situation implies that "complementary mediation" exists. According to the Zhao, Lynch & Chen (2010) "complementary mediation" is similar to Baron & Kenny's (1986) partial mediation, and these two overlap. 2) When the regression steps produce significant direct effect and indirect effect (a x b), and these effects exhibit different direction of relationship this situation implies that "competitive mediation" exists. 3) When the regression steps only produce significant indirect effect (a x b) which is the "effect to be mediated" this situation means that "indirect only mediation" exists. According to the Zhao, Lynch & Chen (2010) "indirect only mediation" is similar to Baron & Kenny's full mediation, and these two overlap. The results of mediation models in the following pages are interpreted in congruence to Zhao, Lynch & Chen (2010) decision criteria about effect to be mediated.

# 4.6.1 Significance of Indirect Effect

More recently simulation studies have found percentile bootstrap method more appropriate to conduct mediation analysis in place of causal step approach and Sobel test. Preacher & Hayes (2004), Mackinnon et al. (2002), Mackinnon, Lockwood & William (2004), Mackinnon & Fairchild (2009), and Hayes (2009) found that Sobel test is an inappropriate test to conclude

significance of indirect method, and bootstrap method produces unbiased results for intervening variable.

Bootstrapping is a non-parametric statistical technique which does not require the assumption of normality to be fulfilled. This feature of bootstrap has an edge over Sobel test's non-normal distribution of product of two coefficients. Bootstrap test provides results based on the estimation of indirect effect only. Bootstrap empirically generates distribution of sample population by treating the sample as a tiny reflection of population and then resamples it for n number of times normally for 1,000 or 5,000 times. Every time it constructs a sub-sample of size n it takes the cases from the original sample, and replaces the cases and samples again taking cases from original sample. Each sub-sample of size n represents the empirical distribution of indirect effect of original sample.

After resampling process, bootstrap produces n number of coefficients of indirect effect (a x b), and constructs a percentile range of confidence interval based on the values of coefficients in an ascending order. The lower values of coefficients form lower bound limit of confidence interval and higher values of coefficients form an upper bound limit of confidence interval. The confidence interval then serves as the criteria to test if the indirect effect is non-zero. If zero lies in between the upper and lower bound limit of confidence interval then a researcher accepts the null hypothesis, which states that indirect effect is not different from zero (Preacher & Hayes, 2004; Mackinnon, Lockwood & Williams, 2004; Hayes, 2009; Zhao, Lynch & Chen, 2010). If zero does not lie in between the upper and lower bound limit of confidence interval then a researcher rejects the null hypothesis and the fact about the true existence of indirect effect in the model is empirically established (Preacher & Hayes, 2004; Mackinnon, Lockwood & Williams, 2004; Hayes, 2009; Zhao, Lynch & Chen, 2010). Significance of indirect effect in mediation models of

this thesis is tested by the application of percentile bootstrap method in SPSS software by conducting process analysis using the syntax developed by Preacher & Hayes (2004). Table 14 shows the result of bootstrap test conducted to test the significance of indirect effect.

 Table 14 Significance of Indirect Effect (Results of Percentile Bootstrap test)

Indirect Effect	Beta	t- vale	Confidence Interval (Lower limit Upper limit)	Result	Confidence Level
Confusion→Distrust→Brand Love	-0.031	-1.9	-0.06 -0.01	Significant	95%
Confusion→Distrust→Brand Image	-0.043	-0.211	-0.90 -0.00	Significant	95%

### 4.7 Results of Mediation Model 1

Fig. 4 depicts mediation model 1 of this thesis in which distrust is a mediator variable between consumer confusion (X) and brand image (Y). The results of SEM reported in Table 13 show that consumer confusion is a significant predictor of distrust and positively affects consumer distrust ( $\beta_{confusion}$ =0.358, p < 0.001). Distrust negatively affects brand image ( $\beta_{distrust}$  = -0.445, p< 0.001). The negative relationship between distrust and brand image is significant at less than 1 percent significance level. Consumer confusion positively affects brand image ( $\beta_{confusion}$ =0.175, p> 0.05) and this relationship is not significant at p =0.162.

According to these results confusion significantly affects distrust, and distrust significantly affects brand image therefore, indirect effect (a x b) of mediation model 1 is significant and direct

effect: path 'c' is not significant. As per Zhao, Lynch & Chen's (2010) criteria indirect only mediation exists in this model.

Table 14 shows the result of bootstrap test conducted to test the significance of indirect effect. The coefficient of indirect effect of consumer confusion on brand image as measured by percentile bootstrap method is negative ( $\beta$ = -.043). The confidence interval for this indirect effect has a lower bound limit of -.0916, and an upper bound limit of -.0100 which indicates that confusion has a significant indirect negative effect on brand image through distrust at 95% confidence level. As per these results distrust fully mediates the relationship between consumer confusion and brand image. Therefore, these results support H<sub>1</sub>: Brand image have a negative relationship with consumer confusion, and distrust mediates this relationship. Appendix 4 and appendix 5 shows the output of process analysis for this model.

### 4.8 Results of Mediation Model 2

Fig. 3 depicts mediation model 2 of this thesis in which distrust is a mediator variable between consumer confusion (X) and brand love (Y). The results of SEM reported in Table 13 show that consumer confusion is a significant predictor of distrust and positively affects consumer distrust ( $\beta_{confusion}$ =0.358, p < 0.001). Distrust negatively affects brand love ( $\beta_{distrust}$ =-0.217, p<0.001). The negative relationship between distrust and brand love is significant at less than 1 percent significance level. Consumer confusion positively affects brand love ( $\beta_{confusion}$ = 0.034, p> 0.05), and this relationship is not significant at p=0.692.

According to the results of model 2 consumer confusion significantly affects distrust, and distrust significantly affects brand love therefore, indirect effect (a x b) of mediation model 2 is

significant and direct effect: path 'c' is not significant. As per Zhao, Lynch & Chen's (2010) criteria indirect only mediation exists in this model.

Table 14 shows the result of bootstrap test conducted to test the significance of indirect effect. The coefficient of indirect effect of consumer confusion on brand love as measured by percentile bootstrap method is negative ( $\beta$ = -.031). The confidence interval for this indirect effect has a lower bound limit of -.0687, and an upper bound limit of -.0053 which indicates that confusion has a significant indirect negative effect on brand love through distrust at 95% confidence level. As per these results distrust fully mediates the relationship between consumer confusion and brand love. Therefore, these results support H<sub>2</sub>: Brand love have a negative relationship with consumer confusion, and distrust mediates this relationship. Appendix 6 and appendix 7 shows the output of process analysis for this model.

**Table 15** Summary of Results

Sr.	Hypothesis	Result
No.		
1	<b>H</b> <sub>1</sub> : Brand image have a negative relationship with consumer	Accepted
	confusion and distrust mediates this relationship.	
2	<b>H<sub>2</sub>:</b> Brand love have a negative relationship with consumer	Accepted
	confusion and distrust mediates this relationship.	

# 5. Conclusion

This thesis hypothesized that distrust acts as a mediator variable between consumer confusion and brand image, and between consumer confusion and brand love. Quantitative research strategy was utilized to test these hypotheses. In a survey method a total of 350 questionnaires were administered to the postgraduate and undergraduate students of Lahore School of Economics, Pakistan and 291 usable questionnaires were analyzed which made the response rate of 83%. Results of CFA confirmed the reliability and validity of the variables. Results of SEM shows that confusion has an indirect negative effect on brand image and brand love through distrust and has no direct significant effect on brand image and brand love.

According to SEM results reported in Table 14 distrust had a significant positive relationship with consumer confusion ( $\beta$ = 0.358, p= 0.000 or p< 0.001), a significant negative relationship with brand image ( $\beta$  = -0.445, p= 0.000 or p< 0.001), and a significant negative relationship with brand love ( $\beta$  = -0.217, p= 0.000 or p< 0.001). Therefore, according to the mediation analysis approach developed by Zhao, Lynch & Chen (2010) when only indirect effect (a x b) is significant in a mediation model there exists an "indirect only mediation" which suggests that the proposed mediator variable fully mediates the relationship between independent and dependent variable.

Thereafter, the significance of indirect effect (a x b) was tested using percentile bootstrap method by conducting process analysis developed by Preacher and Hayes (2004). The results of bootstrap test as shown in Table 15 yielded significant negative indirect effect (a x b) of consumer confusion on brand image (Lower limit of Bootstrap percentile confidence interval = -.0916 and Upper limit of Bootstrap percentile confidence interval = -.0687 and Upper limit

of Bootstrap percentile confidence interval = -.0053) through distrust at 95% confidence level. The results of thesis conclude that the distrust acts as a mediator variable between independent and dependent variables of this thesis, and fully mediates the relationship between consumer confusion and brand love, and also between the consumer confusion and brand image.

## 6. Discussion

To the best of her knowledge this researcher has found the findings of this thesis that indirect relationship of consumer confusion with brand love and brand image have not been reported by the other researchers. Various studies have observed direct relationship of brand love and brand image with different independent variables a few studies in literature have analyzed indirect relationship of brand love and brand image with different mediator variables but not with distrust.

Consumer confusion has not received much of researchers' attention as a predictor variable for brand image and brand love so far. Various studies have observed direct relationship of consumer confusion with different dependent variables, and a few studies in literature have analyzed indirect relationship of consumer confusion with different mediator variables but not with distrust.

Moon, Costello, & Koo (2017) studied the indirect impact of consumer confusion on negative word of mouth, distrust and dissatisfaction, with the role of negative emotions acting as a mediator variable. The study was carried out for eco-labels products in food and detergent product categories. The data was collected from the consumers in Korea. Moon, Costello, & Koo (2017) conducted quasi experimental field study, and collected data from three hundred and ten consumers of eco-label food products and detergents. The results of the quasi experiment show

that similarity confusion, information overload confusion and ambiguity confusion indirectly leads consumers to dissatisfaction, distrusting the brand and spreading negative word of mouth about the brand. Consumers' negative emotions were found to partially mediate these relationships.

Wang & Shukla (2013) analyzed the indirect effect of confusion on consumer's satisfaction with role of choice goal acting as a mediator variable. Wang & Shukla (2013) carried out a survey, and took smartphone as product category. They obtained data from a convenient sample of three hundred and sixteen undergraduate students in UK who were smart phone users. Wang & Shukla (2013) concluded that confusion shares an indirect negative relationship with satisfaction. They also reported that the variable of choice goals partially mediates the relationship between similarity confusion and satisfaction, while choice goal was found to fully mediate the relationship between ambiguity confusion and satisfaction, and also mediated the relationship between information overload confusion and satisfaction.

Kocyigit & Ringle (2011) studied the indirect relationship of brand confusion with private label proneness. Kocyigit & Ringle (2011) proposed brand dissatisfaction as a mediator variable between brand confusion and private label proneness. They carried out an online survey and collected nine hundred usable responses from consumers of detergents in Germany. The results of their study show that confusion shares a positive indirect relationship with private label proneness and dissatisfaction fully mediates this relationship.

Walsh & Mitchell (2010) analyzed the effect of confusion on word of mouth, broader marketplace trust and macro-satisfaction. They collected survey data from a sample of three hundred and thirty five college students in Germany. Upon analyzing the data, Walsh & Mitchell (2010) found that similarity confusion negatively affects customers' word of mouth behavior, trust and macro satisfaction. Findings of their study also revealed that information overload confusion

positively affects word of mouth, negatively affects macro satisfaction, and does not significantly affect marketplace trust. Ambiguity confusion was found to positively impact general word of mouth and marketplace trust, and was not found to significantly impact macro satisfaction.

Huang (2017) proposed that brand love and brand trust mediates the relationship between consumers' brand experience and brand loyalty. In order to test their proposed hypotheses Huang (2017) administered survey questionnaire to a sample of college students, who were also mobile phone users, in Taiwan. Huang (2017) received a total of two hundred and thirty seven usable responses, and the results of the study show that the relationship between brand experience and brand loyalty is partially mediated by brand love, and fully mediated by brand trust.

Loureiro, Ruediger & Demetris (2012) analyzed indirect effect of brand loyalty on brand love and brand attachment with affective commitment and trust acting as mediator variables. They carried out a survey research and collected data from a convenient sample of three hundred and seventy four car users in Portugal. The results of their analysis show that brand loyalty has an indirect positive effect on brand love and brand attachment with affective commitment and trust as mediator variables and these mediator variables were found to partially mediate the indirect relationship.

All the relevant studies reported earlier in this chapter have analyzed mediation models and did not incorporate distrust as a mediator variable. However, many confusion studies analyzed the negative effect of consumer confusion on trust which laid down the foundation of hypothesizing distrust as a mediator variable between consumer confusion, and brand image and brand love. The findings of this thesis are consistent with literature about the positive relationship of consumer confusion and distrust. The findings of this thesis also reveal that

consumer distrust negatively affects brand love and brand image. Findings of this thesis have theoretical implications as well as marketing implications.

## **6.1 Theoretical Implications**

This thesis aimed to make three theoretical contributions. Firstly, this thesis further tests the psychometric validity of consumer confusion scale develop by Walsh, Hennig-Thurau, & Mitchell (2007), and found the scale perfectly reliable after administering it to a sample population of Lahore, Pakistan. This newly developed scale has been previously administered to sample population in UK, Germany, and recently in Korea only. The reliability and validity analysis of confusion scale suggest that this scale is valid and reliable for different populations across Europe and Asia as well.

Secondly, abundant research on the positive predictors of brand love and brand image is available in literature while scarce research exists on what could lead consumers to not love the brand and produce an unfavorable image in the mind of consumers. Consumer dissatisfaction has been the subject of research in this area and researchers seem to agree that dissatisfaction is key to lose customers in service business as well as consumer goods business. This thesis predicted that consumer confusion has potential to harm consumers' trust which ultimately leads consumers relying lesser and lesser on their loved brand, and at the same time confusion produces an unfavorable image about their brand. The findings of this thesis support the hypothesized relationship, and conclude that confusion leads consumers to distrust their loved brands, and confusion has an indirect negative effect on brand love and brand image in high product involvement situation. Thus this thesis significantly contributes to consumer behavior theory by reporting that an association exists between consumer confusion, distrust, brand love, and brand image. Before this thesis researchers did not recognize consumer

confusion as an antecedent responsible for driving away consumers' love for brand and damaging the brand image built over the years by the efforts of marketers.

Thirdly, this thesis investigated about the role of consumer distrust as a mediator variable to produce negative effect of confusion on brand love and brand image. It was reported in this thesis that distrust fully mediates the relationship between consumer confusion and brand love, and also between consumer confusion and brand image. Therefore, though brand love is responsible for brand loyalty, and as reported by earlier findings, yet such loyalty could cease to exist if consumers start to distrust the brand as a consequence of increasing confusion faced by them. The discovery of this relationship also significantly contributes to theory of consumer behavior.

Lastly this thesis made a methodological contribution by making use of new approach to analyze and report mediation models of this thesis. Past studies on brand love, brand image and consumer confusion reported earlier in this thesis employed Baron & Kenny's approach to analyze mediation, and Sobel test for concluding about significance of indirect effect. This thesis used a new approach developed by Zhao, Lynch & Chen (2010) to analyze mediation, and percentile bootstrap test was performed in this thesis to conclude about the significance of indirect effect.

# **6.2 Implications for Marketers**

Brand love and brand image are the key variables available to marketer for retaining, and attracting new customers and for enhancing brand equity (Kocyigit & Ringle, 2011; Alhaddad, 2014; Chaudhrui & Holbrook, 2001; Keller, 1993; Delgado & Aleman, 2005). Constructs of brand love and brand image hold great significance to marketers for developing marketing plan and strategies.

Marketers need to be extremely cautious in case of products for which consumers are highly involved and devote significant amount of their time and effort in buying them. Consumers are becoming more and more involved in purchase process. For example diet conscious consumers are getting more and more involved in buying healthy food and they put a lot of time in sopping for healthy food. They look for nutrition facts, ingredients, safe packaging of food as well as composition of formula for certain edible products.

For some high involvement products a company may have the monopoly in the market for example luxury products but when a company has no monopoly over the market and it offers a product which demands a certain level of involvement then marketers of that company should familiarize themselves with the concept of confusion. In such cases marketers should expect their consumers to get confused because of many similar products in the market.

Confusion results in decision postponement, and post-purchase dissatisfaction (Walsh & Mitchell 2010; Kocigyit & Ringle 2012). Confused consumers are very much likely to get angry at the time of shopping and they may doubt the capacity of their loved brand to serve them. The state of confusion can hurt the trust of consumers, converting it into distrust; which in turn has negative effects on consumer-brand relationship. Therefore, marketers should continue to carry out research to see if the consumers face confusion while shopping for their

brand. To find out about the exact source of confusion, marketers can analyze the relationship of each dimension of confusion with the brand image, brand love or any key marketing variable which is most likely to be affected by confusion and also test for distrust as a mediator variable because confusion fosters distrust.

Four categories of various coping strategies adopted by consumers discussed in the literature are: 1) developing goals for buying a product, 2) searching for ample information, 3) reducing the set of alternative products, and 4) consulting about the purchase decision with friends or experts. (Mitchel & Papavasilliou, 1997; Mitchell & Papavasilliou, 1999; Mitchell, Walsh, & Yamin, 2005). Consistent with these coping strategies marketers can assist consumers to get rid of confusion while shopping for their product by recruiting sales personnel who can provide consumers with ample information about the product, and provide consultation to consumers.

Since marketers are now well aware that trust is the corner-stone of consumer brand relationship and confusion leads consumers to distrust the brand. In this way confusion negatively affects brand image and brand love. When consumers face immense confusion and postpone their decision this situation signify the presence of distrust which force consumers to doubt the capacity of brand and postpone the purchase. Marketers should find out if their customers are facing confusion with their product offerings, labelling or advertisements, and eliminate those sources of confusion in a manner which enhances consumer's trust.

### 6.3. Limitations & Future directions

Every research comes with some limitations so this thesis also has some limitations. Firstly there is not much variation in the age of sample population and data almost comes from the respondents between ages 21-23. Secondly, the use of students as sample put one limitation on the research about the level of involvement and attitude of respondents towards purchase of high involvement product. Since students in Pakistan have no income of their own therefore, they live with their parents, and rely on their parent's income for their study, living, and every necessity of life. It is assumed that students are very carefree in their spending as they are supplied with everything by their parents. Their level of involvement in a transaction which requires a handsome amount of money, like mobile phone in case of this thesis, might be influenced by their parents' income level.

For future research this area seems to have potential. Future researchers can carry out the same research across different product categories which require more involvement of consumers for instance, the purchase of healthy food, car, laptop computer, and house. Future researcher can also ensure variation in the age of sample population as purchase of such products cannot be attributed to student population. This research was carried out for a tangible good, future researchers can analyze the effects of confusion on consumption of service. For example, airline industry has expanded vastly over the years and a study on confusion in service offerings by airlines can prove a subject of research. Internet selling has become very common over the years and consumers who buy on web are being bombarded with thousands of offerings of same product by local and global manufacturers creating confusion for consumers buying on internet. This same research could be conducted in the context of internet shopping.

#### References

- Aaker, D. A. (1996). Measuring brand equity across products and markets. *California Management Review*, 38(3).
- Ahuvia, A. C. (1993). I love it!: Towards a unifying theory of love across diverse love objects (abridged).
- Ahluwalia, R., Burnkrant, R. E., & Unnava, H. R. (2000). Consumer response to negative publicity: The moderating role of commitment. *Journal of Marketing Research*, *37*(2), 203-214.
- Ajzen, I. (1991). The theory of planned behaviour. *Organizational Behavior and Human Decision Processes*, 50 (2), 179-211.
- Aribarg, A., Arora, N., Henderson, T. and Kim, Y. (2014). Private label imitation of a national brand: Implications for consumer choice and law. *Journal of Marketing Research*, *51* (6), 657-675.
  - Anninou, I. (2018). The application of appraisal theories of emotions in the case of consumer confusion: Theoretical and practical implications. *Management Decision*.
  - Alhaddad, A. (2014). The effect of brand image and brand loyalty on brand equity. *International Journal of Business and Management Invention*, *3*(51), 28-32.
  - Albert, N., Merunka, D., & Valette-Florence, P. (2008). When consumers love their brands: Exploring the concept and its dimensions. *Journal of Business Research*, 61(10), 1062-1075.
  - Albert, N., Merunka, D., & Valette-Florence, P. (2009). The feeling of love toward a brand: Concept and measurement. *ACR North American Advances*.
  - Ahuvia, A. C. (2005). Beyond the extended self: Loved objects and consumers' identity narratives. *Journal of Consumer Research*, 32(1), 171-184.
  - Ahuvia, A., Batra, R., & Bagozzi, R. (2008). Brand love: Towards an integrative model. *ACR North American Advances*.

- Albert, N., & Valette-Florence, P. (2010). Measuring the love feeling for a brand using interpersonal love items. *Journal of Marketing Development and Competitiveness*, 5(1), 57.
- Amine, A. (1998). Consumers' true brand loyalty: The central role of commitment. *Journal of Strategic Marketing*, 6(4), 305-319.
- Albert, N. and Merunka, D. (2013), "The role of brand love in consumer-brand relationships", Journal of Consumer Marketing, Vol. 30 No. 3, pp. 258-266
  - Atieno, O. P. (2009). An analysis of the strengths and limitation of qualitative and quantitative research paradigms. *Problems of Education in the 21st Century*, 13(1), 13-38.
  - Bauer, H., Heinrich, D., & Albrecht, C. M. (2009). All you need is love: Assessing consumers' brand love. *In Proceedings of the American Marketing Association Summer Educators Conference* (252-53). Chicago: American Marketing Association.
  - Batra, R., & Homer, P. M. (2004). The situational impact of brand image beliefs. *Journal of Consumer Psychology*, 14(3), 318-330.
  - Bagozzi, R. P., Batra, R., & Ahuvia, A. (2017). Brand love: development and validation of a practical scale. *Marketing Letters*, 28(1), 1-14.
  - Bhandari, M. and Rodgers, S., (2018). What does the brand say? Effects of brand feedback to negative eWOM on brand trust and purchase intentions. *International Journal of Advertising*, 37(1), 125-141.
  - Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, *51*(6), 1173.
  - Belk, R. W. (1988). Possessions and the extended self. *Journal of Consumer Research*, 15(2), 139-168.
  - Batra, R., Ahuvia, A., & Bagozzi, R. P. (2012). Brand love. Journal of Marketing, 76(2), 1-16.
  - Barber, B. (1983). The logic and limits of trust. *University Press New Brunswick* 2-25.

- Balabanis, G., & Craven, S. (1997). Consumer confusion from own brand lookalikes: An exploratory investigation. *Journal of Marketing Management*, 13(4), 299-313.
- Brun, E., Steinar Saetre, A., & Gjelsvik, M. (2009). Classification of ambiguity in new product development projects. *European Journal of Innovation Management*, 12(1), 62-85.
- Brown, T. A., & Moore, M. T. (2012). Confirmatory factor analysis. *Handbook of Structural Equation Modeling*, 361-379.
- Benamati, J., Serva, M. A., & Fuller, M. A. (2006). Are trust and distrust distinct constructs? An empirical study of the effects of trust and distrust among online banking users. *Proceedings of the 39th Annual Hawaii International Conference*, (6), 121b.
- Carpenter, G. S., & Nakamoto, K. (1989). Consumer preference formation and pioneering advantage. *Journal of Marketing Research*, 285-298.
- Caporaso, J. A. (1995). Research design, falsification, and the qualitative-quantitative divide, 457-460.
- Calvo Porral, C. and Lang, M.F., (2015). Private labels: The role of manufacturer identification, brand loyalty and image on purchase intention. *British Food Journal*, 117(2),506-522.
- Celsi, R. L., & Olson, J. C. (1988). The role of involvement in attention and comprehension processes. *Journal of Consumer Research*, 15(2), 210-224.
- Chryssochoidis, G. (2000). Repercussions of consumer confusion for late introduced differentiated products. *European Journal of Marketing*, *34*(5/6), 705-722.
- Chang, Y. S., & Fang, S. R. (2013). Antecedents and distinctions between online trust and distrust: Predicting high-and low-risk internet behaviors. *Journal of Electronic Commerce Research*, *14*(2), 149.
- Chaudhuri, A., & Holbrook, M. B. (2001). The chain of effects from brand trust and brand affect to brand performance: The role of brand loyalty. *Journal of Marketing*, 65(2), 81-93.

- Chestnut, R. W., & Jacoby, J. (1978). Consumer information processing: Emerging Theory and Findings. Graduate School of Business, Columbia University.
- Cobb-Walgren, C. J., Ruble, C. A., & Donthu, N. (1995). Brand equity, brand preference, and purchase intent. *Journal of Advertising*, 24(3), 25-40.
- Cretu, A. E., & Brodie, R. J. (2007). The influence of brand image and company reputation where manufacturers market to small firms: A customer value perspective. *Industrial Marketing Management*, 36(2), 230-240.
- Cox, D.F. (1967). Risk taking and information handling in consumer behavior. *Division of Research, Graduate School of Business Administration, Harvard University, Boston, MA*, 34-81.
- Chaudhuri, A. and Holbrook, M. B. (2002) Product-class effects on brand commitment and brand outcomes: The role of brand trust and brand affect. *Journal of Brand Management* 10 (1): 33 58.
- Castaño, R., & Eugenia Perez, M. (2014). A matter of love: consumers' relationships with original brands and their counterfeits. *Journal of Consumer Marketing*, 31(6/7), 475-482.
- D Harrison McKnight, N. L. C. (2001). What trust means in e-commerce customer relationships: An interdisciplinary conceptual typology. *International journal of electronic commerce*, 6(2), 35-59.
- Djatmiko, T. and Pradana, R.. (2016). Brand image and product price; It's impact for Samsung smartphone purchasing decision. *Procedia-Social and Behavioral Sciences*, 219
- Dholakia, U. M. (1997). An investigation of some determinants of brand commitment. *ACR North American Advances*.
- Diamond, S.A. (1981). Trademark problems and how to avoid them. Revised edition. *Crain Communications, Chicago, IL.*

- Delgado-Ballester, E., Munuera-Aleman, J. L., & Yague-Guillen, M. J. (2003). Development and validation of a brand trust scale. *International Journal of Market Research*, 45(1), 35-54.
- Dhar, R. (1997). Consumer preference for a no-choice option. *Journal of Consumer Research*, 24(2), 215-231.
- Dobni, D., & Zinkhan, G. M. (1990). In search of brand image: A foundation analysis. *ACR North American Advances*.
- Delgado-Ballester, E., & Luis Munuera-Alemán, J. (2001). Brand trust in the context of consumer loyalty. *European Journal of Marketing*, *35*(11/12), 1238-1258.
- Delgado-Ballester, E., & Luis Munuera-Alemán, J. (2005). Does brand trust matter to brand equity?. *Journal of Product & Brand Management*, 14(3), 187-196.
- Dawar, N., & Parker, P. (1994). Marketing universals: Consumers' use of brand name, price, physical appearance, and retailer reputation as signals of product quality. *The Journal of Marketing*, 81-95.
- Deutsch, M. (1973). The resolution of conflict. Yale University Press.
- Engel, James E., David Kollat, and Roger D. Blackwell (1978). Consumer Behavior. New York: Dryden Press.
- Ermeç Sertoğlu, A. and Kavak, B. (2017). A more comprehensive view of consumer confusion: Scale development. *Journal of International Consumer Marketing*, 29(4), 265-276.
- Flavián, C., & Guinalíu, M. (2006). Consumer trust, perceived security and privacy policy: Three basic elements of loyalty to a web site. *Industrial Management & Data Systems*, 106(5), 601-620.
- Fetscherin, M. (2014). What type of relationship do we have with loved brands?. *Journal of Consumer Marketing*, 31(6/7), 430-440.
- Field, A. (2013). Discovering statistics using IBM SPSS statistics. *Sage*.

- Frost, T., Stimpson, D. V., & Maughan, M. R. (1978). Some correlates of trust. *The Journal of Psychology*, 99(1st Half), 103.
- Fornell, C., & Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: Algebra and statistics. *Journal of Marketing Research*, 382-388.
- Fournier, S. (1998). Consumers and their brands: Developing relationship theory in consumer research. *Journal of Consumer Research*, 24(4), 343-373
- Friedman, M. P. (1966). Consumer confusion in the selection of supermarket products. *Journal of Applied Psychology*, 50(6), 529.
- Fritz, M. S., & MacKinnon, D. P. (2007). Required sample size to detect the mediated effect. *Psychological Science*, 18(3), 233-239.
- Gardner, B. B., & Levy, S. J. (1955). The product and the brand. *Harvard Business Review*, 33(2), 33-39.
- Giampietri, E., Verneau, F., Del Giudice, T., Carfora, V., & Finco, A. (2018). A Theory of planned behaviour perspective for investigating the role of trust in consumer purchasing decision related to short food supply chains. *Food Quality and Preference*, 64, 160-166.
- Ganesan, S., & Hess, R. (1997). Dimensions and levels of trust: Implications for commitment to a relationship. *Marketing Letters*, 8(4), 439-448.
- Gefen, D., Straub, D., & Boudreau, M. C. (2000). Structural equation modeling and regression: Guidelines for research practice. *Communications of the Association for Information Systems*, 4(1), 7.
- Ghosh, T., & Rao, V. G. (2014). Consumer confusion in mobile application buying: The moderating role of need for cognition. *International Journal of E-Business Research* (*IJEBR*), 10(4), 52-70.
- Garbarino, E., & Johnson, M. S. (1999). The different roles of satisfaction, trust, and commitment in customer relationships. *The Journal of Marketing*, 70-87.

- Guba, E. G., & Lincoln, Y. S. (1994). Competing paradigms in qualitative research. *Handbook of Qualitative Research*, 2(163-194), 105.
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (1998). *Multivariate Data Analysis* (Vol. 5, No. 3, pp. 207-219). Upper Saddle River, NJ: Prentice hall.
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed, a silver bullet. *Journal of Marketing Theory and Practice*, 19(2), 139-152.
- Hayes, A. F. (2009). Beyond Baron and Kenny: Statistical mediation analysis in the new millennium. *Communication Monographs*, 76(4), 408-420.
- Hoyle, R. H. (2000). Confirmatory factor analysis. In *Handbook of Applied Multivariate Statistics and Mathematical Modeling* (pp. 465-497).
- Harwell, M. R. (2011). Research Design in Qualitative/Quantitative. The Sage Handbook for Research in Education: Pursuing ideas as the keystone of exemplary inquiry, 147.
- Hegner, S. M., Fenko, A., & Teravest, A. (2017). Using the theory of planned behaviour to understand brand love. *Journal of Product & Brand Management*, 26(1), 26-41.
- Hall-Phillips, A., & Shah, P. (2017). Unclarity confusion and expiration date labels in the United States: A consumer perspective. *Journal of Retailing and Consumer Services*, *35*, 118-126.
- Hsieh, M. H., Pan, S. L., & Setiono, R. (2004). Product-, corporate-, and country-image dimensions and purchase behavior: A multicountry analysis. *Journal of the Academy of Marketing Science*, 32(3), 251-270.
- Hoch, S. J., & Deighton, J. (1989). Managing what consumers learn from experience. *The Journal of Marketing*, 1-20.
- Howard, D. J., Kerin, R. A., & Gengler, C. (2000). The effects of brand name similarity on brand source confusion: Implications for trademark infringement. *Journal of Public Policy & Marketing*, 19(2), 250-264.

- Howe, K., & Eisenhart, M. (1990). Standards for qualitative (and quantitative) research: A prolegomenon. *Educational researcher*, 19(4), 2-9.
- Hoch, S. J., & Ha, Y. W. (1986). Consumer learning: Advertising and the ambiguity of product experience. *Journal of Consumer Research*, 13(2), 221-233.
- Hoyer, W. D., & Brown, S. P. (1990). Effects of brand awareness on choice for a common, repeat-purchase product. *Journal of Consumer Research*, 17(2), 141-148.
- Heinrich, D., Albrecht, C. M., & Bauer, H. H. (2012). Love actually? Measuring and exploring consumers' brand love. *Consumer-Brand Relationships—Theory and Practice. London: Routledge*, 137-150.
- Huang, C. C. (2017). The impacts of brand experiences on brand loyalty: Mediators of brand love and trust. *Management Decision*, 55(5).
- Iyengar, S. S., & Lepper, M. R. (2000). When choice is demotivating: Can one desire too much of a good thing? *Journal of Personality and Social Psychology*, 79(6), 995.
- Iyengar, S. S., Wells, R. E., & Schwartz, B. (2006). Doing better but feeling worse: Looking for the "best" job undermines satisfaction. *Psychological Science*, *17*(2), 143-150.
- Jamal, A., & Goode, M. M. (2001). Consumers and brands: A study of the impact of self-image congruence on brand preference and satisfaction. *Marketing Intelligence & Planning*, 19(7), 482-492.
- Jacoby, J. (1984). Perspectives on information overload. *Journal of Consumer Research*, 10(4), 432-435.
- Jacoby, J. (1977). Information load and decision quality: Some contested issues. *Journal of Marketing Research*, 569-573.
- Jacoby, J., Speller, D. E., & Kohn, C. A. (1974). Brand choice behavior as a function of information load. *Journal of Marketing Research*, 63-69.

- Johnson, B. (2001). Toward a new classification of nonexperimental quantitative research. *Educational Researcher*, 30(2), 3-13.
- Jun, P.A.N.G., Tat, K.H. and Siqing, P.E.N.G. (2009). Effects of advertising strategy on consumer-brand relationships: A brand love perspective. *Frontiers of Business Research in China*, *3*(4), 599-620.
- Jeon, J.O. and Baeck, S. (2016). What drives consumer's responses to brand crisis? The moderating roles of brand associations and brand-customer relationship strength. *Journal of Product & Brand Management*, 25(6), 550-567.
- Keller, K.L. (2016). Reflections on customer-based brand equity: perspectives, progress, and priorities. *AMS review*, 6(1-2), 1-16.
- Kasabov, E. (2015). What we know, don't know, and should know about confusion marketing. *European Journal of Marketing*, 49(11/12), 1777-1808.
- Keller, K. L. (1993). Conceptualizing, measuring, and managing customer-based brand equity. *The Journal of Marketing*, 1-22.
- Keh, H.T., Pang, J. and Peng, S. (2007). Understanding and measuring brand love. In Society for Consumer Psychology Conference Proceedings, June, Santa Monica, pp. 84-88
- Kocyigit, O., & Ringle, C. M. (2011). The impact of brand confusion on sustainable brand satisfaction and private label proneness: A subtle decay of brand equity. Journal of Brand Management, 19(3), 195-212.
- Krauss, S. E. (2005). Research paradigms and meaning making: A primer. *The Qualitative Report*, 10(4), 758-770.
- Langer, A., & Eisend, M. (2007). The impact of eco-labels on consumers: Less information, more confusion?. *ACR European Advances*.
- Lau, G. T., & Lee, S. H. (1999). Consumers' trust in a brand and the link to brand loyalty. *Journal of Market-Focused Management*, 4(4), 341-370.
- Leek S., & Kun. D. (2006). Consumer confusion in the Chinese personal computer market. *Journal of Product and Brand Management*, 15(3), 184-193.

- Leek, S., & Kun, D. (2006). Consumer confusion in the Chinese personal computer market. *Journal of Product & Brand Management*, 15(3), 184-193.
- Lewicki, R. J., Tomlinson, E. C., & Gillespie, N. (2006). Models of interpersonal trust development: Theoretical approaches, empirical evidence, and future directions. *Journal of Management*, 32(6), 991-1022.
- Lewicki, R. J., McAllister, D. J., & Bies, R. J. (1998). Trust and distrust: New relationships and realities. *Academy of Management Review*, 23(3), 438-458.
- Lowhorn, G. L. (2007). Qualitative and quantitative research: How to choose the best design.
- Loken, B., Ross, I., & Hinkle, R. L. (1986). Consumer confusion of origin and brand similarity perceptions. *Journal of Public Policy & Marketing*, 195-211.
- Low, G.S. & Lamb Jr, C.W. (2000). The measurement and dimensionality of brand associations. *Journal of Product & Brand Management*, 23(6), 350-370.
- Larzelere, R. E., & Huston, T. L. (1980). The dyadic trust scale: Toward understanding interpersonal trust in close relationships. *Journal of Marriage and the Family*, 595-604.
- Lewicki, R. J., & Bunker, B. B. (1995). Trust in relationships. *Administrative Science Quarterly*, 5, 583-601.
- Malik, M. E., Ghafoor, M. M., Iqbal, H. K., Ali, Q., Hunbal, H., Noman, M., & Ahmad, B. (2013). Impact of brand image and advertisement on consumer buying behavior. *World Applied Sciences Journal*, 23(1), 117-122.
- Matzler, K., & Waiguny, M. (2005). Consequences of customer confusion in online hotel booking. *Information and Communication Technologies in Tourism 2005*, 306-317.
- Menidjel, C., Benhabib, A., & Bilgihan, A. (2017). Examining the moderating role of personality traits in the relationship between brand trust and brand loyalty. *Journal of Product & Brand Management*, 26(6), 631-649.

- Matzler, K., Stieger, D., & Füller, J. (2011). Consumer confusion in internet-based mass customization: Testing a network of antecedents and consequences. *Journal of Consumer Policy*, 34(2), 231-247.
- Malhotra, N. K. (1982). Information load and consumer decision making. *Journal of Consumer Research*, 8(4), 419-430.
- Malhotra, N. K. (1984). Reflections on the information overload paradigm in consumer decision making. *Journal of Consumer Research*, 10(4), 436-440.
- MacKinnon, D. P., & Fairchild, A. J. (2009). Current directions in mediation analysis. *Current Directions in Psychological Science*, 18(1), 16-20.
- MacKinnon, D. P., Lockwood, C. M., Hoffman, J. M., West, S. G., & Sheets, V. (2002). A comparison of methods to test mediation and other intervening variable effects. *Psychological Methods*, 7(1), 83.
- MacKinnon, D. P., Lockwood, C. M., & Williams, J. (2004). Confidence limits for the indirect effect: Distribution of the product and resampling methods. *Multivariate Behavioral Research*, 39(1), 99-128.
- McKnight, D. H., Choudhury, V., & Kacmar, C. (2002). Developing and validating trust measures for e-commerce: An integrative typology. *Information systems research*, *13*(3), 334-359.
- McKnight, D. H., Kacmar, C. J., & Choudhury, V. (2004). Dispositional trust and distrust distinctions in predicting high-and low-risk internet expert advice site perceptions. *E-Service Journal*, 3(2), 35-55.
- McKnight, D. H., & Chervany, N. L. (2001). Trust and distrust definitions: One bite at a time. In *Trust in Cyber-Societies* (pp. 27-54). Springer, Berlin, Heidelberg.
- McKnight, D. H., & Choudhury, V. (2006, August). Distrust and trust in B2C e-commerce: Do they differ? In *Proceedings of the 8th international conference on Electronic commerce: The new e-commerce: innovations for conquering current barriers, obstacles and limitations to conducting successful business on the internet (pp. 482-491).* ACM.

- Miaoulis, G., & d'Amato, N. (1978). Consumer confusion & trademark infringement. *The Journal of Marketing*, 48-55.
- Mitchell, V. W., & Papavassiliou, V. (1997). Exploring consumer confusion in the watch market. *Marketing Intelligence & Planning*, 15(4), 164-172.
- Mitchell, V. W., & Papavassiliou, V. (1999). Marketing causes and implications of consumer confusion. *Journal of Product & Brand Management*, 8(4), 319-342.
- Mitchell, V. W., Walsh, G., & Yamin, M. (2004). Reviewing and redefining the concept of consumer confusion. *Mansucript Manchester School of Management: Manchester*.
- Mitchell, V. W., Walsh, G., & Yamin, M. (2005). Towards a conceptual model of consumer confusion. *NA-Advances in Consumer Research Volume 32*.
- Moon, S. J., Costello, J. P., & Koo, D. M. (2017). The impact of consumer confusion from ecolabels on negative WOM, distrust, and dissatisfaction. *International Journal of Advertising*, 36(2), 246-271.
- Morgan, R. M. and Hunt, S. D. (1994) The commitment- trust theory of relationship marketing. *Journal of Marketing* 58 (3): 20 38.
- Moorman, C., Zaltman, G., & Deshpande, R. (1992). Relationships between providers and users of market research: The dynamics of trust within and between organizations. *Journal of Marketing Research*, 29(3), 314.
- Moorman, C., Deshpande, R., & Zaltman, G. (1993). Factors affecting trust in market research relationships. *The Journal of Marketing*, 81-101.
- Nyadzayo, M. W., & Khajehzadeh, S. (2016). The antecedents of customer loyalty: A moderated mediation model of customer relationship management quality and brand image. *Journal of Retailing and Consumer Services*, 30, 262-270.

- Newman, I., & Benz, C. R. (1998). Qualitative-quantitative research methodology: Exploring the interactive continuum. *SIU Press*.
- Pimentel, R. W., & Reynolds, K. E. (2004). A model for consumer devotion: Affective commitment with proactive sustaining behaviors. *Academy of Marketing Science Review*, 2004, 1.
- Preacher, K. J., & Hayes, A. F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior Research Methods, Instruments, and Computers*, 36, 717-731.
- Ponterotto, J. G. (2005). Qualitative research in counseling psychology: A primer on research paradigms and philosophy of science. *Journal of Counseling Psychology*, 52(2), 126.
- Roger D. Blackwell (1982), Consumer Behavior. New York: Dryden Press.
- Rempel, J. K., Holmes, J. G., & Zanna, M. P. (1985). Trust in close relationships. *Journal of Personality and Social Psychology*, 49(1), 95.
- Rotter, J. B. (1980). Interpersonal trust, trustworthiness, and gullibility. *American Psychologist*, 35(1), 1.
- Roy, S.K., Eshghi, A. and Sarkar, A. (2013). Antecedents and consequences of brand love. *Journal of Brand Management*, 20(4), 325-332.
- Scanzoni, J. (1979). Social exchange and behavioral interdependence. *Social Exchange in Developing Relationships*, 61-98.
- Shrout, P. E., & Bolger, N. (2002). Mediation in experimental and nonexperimental studies: New procedures and recommendations. *Psychological Methods*, 7(4), 422-445.
- Schreiber, J. B., Nora, A., Stage, F. K., Barlow, E. A., & King, J. (2006). Reporting structural equation modeling and confirmatory factor analysis results: A review. *The Journal of Educational Research*, 99(6), 323-338.

- Sirdeshmukh, D., Singh, J., & Sabol, B. (2002). Consumer trust, value, and loyalty in relational exchanges. *Journal of Marketing*, 66(1), 15-37.
- Shimp, T. A., & Madden, T. J. (1988). Consumer-object relations: A conceptual framework based analogously on Sternberg's triangular theory of love. *NA-Advances in Consumer Research Volume 15*.
- Shiu, J. Y. (2017). Investigating consumer confusion in the retailing context: The causes and outcomes. *Total Quality Management & Business Excellence*, 28(7-8), 746-764.
- Sternberg, R. J. (1986). A triangular theory of love. *Psychological Review*, 93(2), 1.
- Stern, B., Zinkhan, G. M., & Jaju, A. (2001). Marketing images construct definition, measurement issues, and theory development. *Marketing Theory*, 1(2), 201-224.
- Sargeant, A., and Lee, S. (2004) Trust and relationship commitment in the United Kingdom voluntary sector: Determinants of donor behavior. *Psychology and Marketing* 21 (8): 613 635.
- Shukla, P., Banerjee, M., & Adidam, P. T. (2010). Antecedents and consequences of consumer confusion: Analysis of the financial services industry. *ACR North American Advances*.
- Sung, Y., & Campbell, W. K. (2009). Brand commitment in consumer–brand relationships: An investment model approach. *Journal of Brand Management*, 17(2), 97-113.
- Tang, Y. C., Hsieh, Y. C., & Chiu, H. C. (2017). Purchase decision: Does too much choice leave us unhappy?. *European Journal of Marketing*, 51(7/8).
- Taylor, A. B., MacKinnon, D. P., & Tein, J. Y. (2008). Tests of the three-path mediated effect. *Organizational Research Methods*, 11(2), 241-269.
- Trivers, R. L. (1971). The evolution of reciprocal altruism. *The Quarterly review of biology*, 46(1), 35-57.
- Turnbull, P. W., Leek, S., & Ying, G. (2000). Customer confusion: The mobile phone market. *Journal of Marketing Management*, 16(1-3), 143-163.

- Tabachnick, B. G. & Fidell, L. S., 2007, *Using Multivariate Statistics*, Boston: Pearson Education.
- Tuli, F. (2011). The basis of distinction between qualitative and quantitative research in social science: Reflection on ontological, epistemological and methodological perspectives. *Ethiopian Journal of Education and Sciences*, 6(1).
- Walsh, G., Mitchell, V. W., Kilian, T., & Miller, L. (2010). Measuring consumer vulnerability to perceived product-similarity problems and its consequences. *Journal of Marketing Management*, 26(1-2), 146-162.
- Walsh, G., Hennig-Thurau, T., & Mitchell, V. W. (2007). Consumer confusion proneness: Scale development, validation, and application. *Journal of Marketing Management*, 23(7-8), 697-721.
- Wahyuni, D. (2012). The research design maze: Understanding paradigms, cases, methods and methodologies.
- Wallace, E., Buil, I., & de Chernatony, L. (2014). Consumer engagement with self-expressive brands: brand love and WOM outcomes. *Journal of Product & Brand Management*, 23(1), 33-42.
- Wobker, I., Eberhardt, T., & Kenning, P. (2015). Consumer confusion in German food retailing: The moderating role of trust. *International Journal of Retail & Distribution Management*, 43(8), 752-774.
- Williams, C. (2011). Research methods. *Journal of Business & Economics Research (JBER)*, 5(3).
- Walsh, G., & Mitchell, V. W. (2010). The effect of consumer confusion proneness on word of mouth, trust, and customer satisfaction. *European Journal of Marketing*, 44(6), 838-859.
- Whang, Y. O., Allen, J., Sahoury, N., & Zhang, H. (2004). Falling in love with a product: The structure of a romantic consumer-product relationship. *NA-Advances in Consumer Research Volume 31*.

- Wang, Q., & Shukla, P. (2013). Linking sources of consumer confusion to decision satisfaction: The role of choice goals. *Psychology & Marketing*, 30(4), 295-304.
- Yu, C. C., Lin, P. J., & Chen, C. S. (2013). How brand image, country of origin, and self-congruity influence internet users' purchase intention. *Social Behavior and Personality: An International Journal*, 41(4), 599-611.
- Yi, Y. (1993). The determinants of consumer satisfaction: The moderating role of ambiguity. *ACR North American Advances*.
- Zhao, X., Lynch Jr, J. G., & Chen, Q. (2010). Reconsidering Baron and Kenny: Myths and truths about mediation analysis. *Journal of Consumer Research*, 37(2), 197-206.
- Zhang, Y. (2015). The impact of brand image on consumer behavior: A literature review. *Open Journal of Business and Management*, 3(1).
- Zaichkowsky, J. L. (1985). Measuring the involvement construct. *Journal of Consumer Research*, 12(3), 341-352.

#### **Bibliography**

- Chen, Y. C., Shang, R. A., & Kao, C. Y. (2009). The effects of information overload on consumers' subjective state towards buying decision in the internet shopping environment. *Electronic Commerce Research and Applications*, 8(1), 48-58.
- Cho, J. (2006). The mechanism of trust and distrust formation and their relational outcomes. *Journal of Retailing*, 82(1), 25-35.
- Darke, P. R., & Ritchie, R. J. (2007). The defensive consumer: Advertising deception, defensive processing, and distrust. *Journal of Marketing Research*, 44(1), 114-127.
- Foxman, E. R., Muehling, D. D., & Berger, P. W. (1990). An investigation of factors contributing to consumer brand confusion. *Journal of Consumer Affairs*, 24(1), 170-189.

- Foxman, E. R., Berger, P. W., & Cote, J. A. (1992). Consumer brand confusion: A conceptual framework. *Psychology & Marketing*, 9(2), 123-141.
- Greenleaf, E. A., & Lehmann, D. R. (1995). Reasons for substantial delay in consumer decision making. *Journal of Consumer Research*, 22(2), 186-199.
- Gustafsson, A., Johnson, M. D., & Roos, I. (2005). The effects of customer satisfaction, relationship commitment dimensions, and triggers on customer retention. *Journal of Marketing*, 69(4), 210-218.
- Jacoby, J., & Hoyer, W. D. (1989). The comprehension/miscomprehension of print communication: Selected findings. *Journal of Consumer Research*, 15(4), 434-443.
- Jacoby, J., Speller, D. E., & Berning, C. K. (1974). Brand choice behavior as a function of information load: Replication and extension. *Journal of Consumer Research*, 1(1), 33-42.
- Jun, P. A. N. G., Tat, K. H., & Siqing, P. E. N. G. (2009). Effects of advertising strategy on consumer-brand relationships: A brand love perspective. *Frontiers of Business Research in China*, *3*(4), 599-620.
- Kapferer, J. N. (1995). Brand confusion: Empirical study of a legal concept. *Psychology & Marketing*, 12(6), 551-568.
- Kasper, H., Bloemer, J., & Driessen, P. H. (2010). Coping with confusion: The case of the Dutch mobile phone market. *Managing Service Quality: An International Journal*, 20(2), 140-160.
- Malhotra, N. K., Jain, A. K., & Lagakos, S. W. (1982). The information overload controversy: An alternative viewpoint. *The Journal of Marketing*, 27-37.
- Ou, C. X., & Sia, C. L. (2010). Consumer trust and distrust: An issue of website design. *International Journal of Human-Computer Studies*, 68(12), 913-934.
- Ou, C. X., & Sia, C. L. (2009). To trust or to distrust, that is the question: Investigating the trust-distrust paradox. *Communications of the ACM*, 52(5), 135-139.

- Patterson, M. (1999). Re-appraising the concept of brand image. *Journal of Brand Management*, 6(6), 409-426.
- Singh, J., & Sirdeshmukh, D. (2000). Agency and trust mechanisms in consumer satisfaction and loyalty judgments. *Journal of the Academy of Marketing Science*, 28(1), 150-167.
- Sarkar, A., Ponnam, A., & Murthy, B. K. (2012). Understanding and measuring romantic brand love. *Journal of Customer Behaviour*, 11(4), 324-347.
- Severi, E., & Ling, K. C. (2013). The mediating effects of brand association, brand loyalty, brand image and perceived quality on brand equity. *Asian Social Science*, 9(3), 125.
- Tsiotsou, R. H., & Goldsmith, R. E. (2017). Exploring the formation process of brand love: A comparison between goods and services. In *The Customer is NOT Always Right?*Marketing Orientationsin a Dynamic Business World (546-550). Springer, Cham.
- Thomson, M., MacInnis, D. J., & Park, C. W. (2005). The ties that bind: Measuring the strength of consumers' emotional attachments to brands. *Journal of Consumer Psychology*, *15*(1), 77-91.
- Wijaya, B. S. (2013). Dimensions of Brand Image: A Conceptual Review from the Perspective of Brand Communication. *European Journal of Business and Management*, 5(31).

### Appendix 1

Table 5 Respondents' Gender

Gender	Number	Percent
Female	143	49.1
Male	148	50.9

## Appendix 2

**Table 6 Age of Respondents** 

Age	Number of Respondents	Percentage
19	1	0.3
20	12	4.1
21	67	23.0
22	84	28.9
23	69	23.7
24	23	7.9
25	16	5.5
26	5	1.7
27	7	2.4
28	4	1.4
29	1	.3
30	1	.3
34	1	.3
Total Number of Respondents	291	100.0

### Appendix 3

**Table 16 Variance of Constructs and Residuals: (Measurement model)** 

Constructs and Residuals	Estimated Variance	Residuals	Estimated Variance
Distrust	.530	e10	.790
Brand Image	.471	e11	.816
Confusion	.269	e12	.462
Brand Love	.583	e13	.454
e30	.043	e14	.179
e31	.241	e15	.286
e32	.165	e16	.434
e33	.030	e17	.397
e34	.168	e18	.169
e35	.317	e19	.747
e1	.750	e20	1.001
e2	1.115	e21	.449
e3	.672	e22	.412
e4	.744	e23	.402
e5	.567	e24	.265
е6	.635	e25	.338
e7	.854	e26	.513
e8	1.025	e27	.403
e9	.887	e 28	.462
		e 29	.372

# **Appendix 4 Output of Bootstrap Test (Mediation model 1)**

Run MATRIX p	rocedure:					
*****	**** PROCESS	Procedure	e for SPSS Ve	ersion 3.00	*****	*****
	itten by And: ation availal					es3
*****	*****	*****	****	*****	*****	*****
Model : 4 Y : Bra: X : con M : Dis	fusion					
Sample Size: 291						
************* OUTCOME VARIA Distrust		*****	******	*****	*****	*****
Model Summar R .1848	<del>-</del>	MSE .8316		df1 1.0000	_	p .0015
Model						
constant confusion	coeff 1.3489 .2836	se .2716 .0887	t 4.9665 3.1969	p .0000 .0015	LLCI .8143 .1090	ULCI 1.8834 .4582
************ OUTCOME VARI. Brand_Image		*****	*****	*****	******	*****
Model Summar	У					
R .2371	R-sq .0562	MSE .6438	=	df1 2.0000	df2 288.0000	.0002
Model						
constant confusion Distrust	coeff 4.5017 .0020 2109	se .2490 .0794 .0518	t 18.0821 .0250 -4.0754	p .0000 .9801 .0001	LLCI 4.0117 1543 3128	ULCI 4.9917 .1583 1091
************ OUTCOME VARIA Brand_Image		** TOTAL I	EFFECT MODEL	*****	*****	*****
Model Summar	=					
R .0424	R-sq .0018	MSE .6785		df1 1.0000	df2 289.0000	.4710
Model	coeff	se	t	р	LLCI	ULCI
constant confusion	4.2171 0578	.2453	17.1892 7218	.0000 .4710	3.7343 2155	4.7000 .0999

## **Appendix 5** Results for Indirect Effect (Mediation model 1)

***** TOT	CAL, DIRECT, A	AND INDIRECT	EFFECTS	OF X ON Y	******	***
Total effect of X Effect		t	n	LLCT	ULCI	c ns
C CS	50	C	P	1101	OLCI	C_P5
0578 0424	080172	218 .47	10 -	.2155	.0999 -	0703
0424						
Direct effect of >		+				
Effect c'cs	se	t	р	LLCI	OTCI	c'_ps
0020 .	0794 .02	250 .98	01 -	.1543	.1583	.0024
.0015						
<pre>Indirect effect(s)</pre>						
Effect Distrust059	bootsE 80 0280					
Partially standard	lized indirect ct BootSE					
Distrust072						
Completely standar	dized indired	st offect(s)	of Y on	V •		
	ct BootSE					
Distrust043	.0208	0916	01	00		
******	***** ANALYS	IS NOTES AND	ERRORS	******	******	**
Level of confidence for all confidence intervals in output: 95.0000						
Number of bootstrap samples for percentile bootstrap confidence intervals: 5000						
END MATRIX						
DIAD HULLIY						

### **Appendix 6 Output of Bootstrap Test (Mediation model 2)**

Run MATRIX p	rocedure:					
******	**** PROCESS	Procedure	e for SPSS V	ersion 3.00	******	*****
	itten by And ation availa					es3
**********  Model : 4  Y : Bra  X : con  M : Dis	fusion	*****	*****	*****	******	*****
Sample Size: 291						
************** OUTCOME VARI Distrust	************ ABLE:	*****	*****	******	******	*****
Model Summar R .1848	y R-sq .0342	MSE .8316		df1 1.0000	-	p .0015
Model	coeff	se	t	p	LLCI	ULCI
constant confusion		.2716	4.9665 3.1969		.8143 .1090	
************ OUTCOME VARI Brand_Love	*********** ABLE:	*****	*****	*****	*****	****
Model Summar	=		_	1.54	1.50	
R .1854	R-sq .0344	MSE .6001		df1 2.0000	df2 288.0000	.0065
Model  constant confusion Distrust	coeff 4.0199 0694 1425	se .2404 .0767	t 16.7248 9046 -2.8509	p .0000 .3664 .0047	LLCI 3.5468 2203 2408	ULCI 4.4930 .0815
************* OUTCOME VARI Brand_Love		** TOTAL 1	EFFECT MODEL	*****	*****	*****
Model Summar	Y R-sq	MSE	F	df1	df2	2
.0843 Model	.0071		2.0706	1.0000	289.0000	.1512
constant confusio n			t 16.3901 -1.4390	p .0000 .1512	LLCI 3.3681 2599	ULCI 4.2874 .040

#### **Appendix 7** Bootstrap Results for Indirect Effect (Mediation model 2)

```
******* TOTAL, DIRECT, AND INDIRECT EFFECTS OF X ON Y *********
Total effect of X on Y
   Effect se t p LLCI
                                                 ULCI
                                                         c_ps
   -.1098 .0763 -1.4390 .1512 -.2599 .0404 -.1397
-.0843
Direct effect of X on Y
   Effect se t p LLCI ULCI c'_ps
c'_cs
   -.0694 .0767 -.9046 .3664 -.2203 .0815 -.0883
-.0533
Indirect effect(s) of X on Y:
          Effect BootSE BootLLCI BootULCI
          -.0404
                  .0217 -.0908 -.0071
Distrust
Partially standardized indirect effect(s) of X on Y:
          Effect BootSE BootLLCI BootULCI
         -.0514
                  .0281
                          -.1179 -.0089
Distrust
Completely standardized indirect effect(s) of X on Y:
          Effect BootSE BootLLCI BootULCI
Distrust
         -.0310
                  .0165 -.0687 -.0053
*******************
Bootstrap estimates were saved to a file
Map of column names to model coefficients:
      Conseqnt Antecdnt
COL1
      Distrust constant
      Distrust confusio
COL2
      Brand Lo constant
COL3
COL4 Brand_Lo confusio
COL5 Brand_Lo Distrust
****************** ANALYSIS NOTES AND ERRORS ****************
Level of confidence for all confidence intervals in output:
 95.0000
Number of bootstrap samples for percentile bootstrap confidence intervals:
 5000
----- END MATRIX ----
```

#### **ANNEXURE:** Survey Questionnaire

#### Relationship of Consumer Confusion with Brand Image and Brand Love

	•	ng carried out as survey. Your coo					
Please	e specify y	our gender:	☐ Male		Female		
Please	e specify yo	our age: 21 or					
-		ile phone pleases e been buying ir		d of mobile p	phone that you	ı have recei	ntly
Sony	Apple	Q-Mobile	Samsung	Huawei	Nokia	HTC	Other
If you o		a mobile phone	pleases circle tl	ne brand of m	obile phone t	hat you into	end to
Sony	Apple	Q-Mobile	Samsung	Huawei	Nokia	НТС	Other
Dear re	espondents	! I thank you in a	ndvance for you	r cooperation	and time.		
Please	complete t	the following que placing a tick o	ıestionnaire wi	th regard to	the brand of	_	one you

well	each of the items listed below please indicate how lit describes your reasons for getting confused while pping for mobile phone.	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1.	Owing to the great similarity of many mobile phones among different brands it is often difficult to detect new model of mobile phone. (SmlCnf)	1	2	3	4	5
2.	Some models of mobile phone look so similar that it is uncertain whether they are made by the same manufacturer/brand or not. (SmlCnf_A)	1	2	3	4	5
3.	Sometimes I want to buy a mobile phone I have seen in an advertisement, but I cannot identify it clearly between the similar mobile phones offered	1	2	3	4	5
4.	by many different brands. (SmlCnf_B)  I do not always know exactly which model of mobile phone meet my needs best. (InfCnf)	1	2	3	4	r
5.	There are so many brands of mobile phone available in the market to choose from that I sometime feel confused. (InfCnf_A)	1	2	3	4	5
6.	Owing to the host of stores it is sometimes difficult to decide where to shop for mobile phone.	1	2	3	4	5
7.	(InfCnf_B)  Most models of mobile phone are very similar and therefore it is hard to distinguish between similar	1	2	3	4	5
8.	models offered by many brands. (InfCnf_C)  Products such as mobile phone often have so many features that a comparison of different models offered by different brands is barely possible. (AmbCnf)	_ 1	2	3	4	5

well i	each of the items listed below please indicate how it describes your reasons for getting confused while bing for mobile phone.	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
9.	When buying a mobile phone I rarely feel sufficiently informed. (AmbCnf_A)	1	2	3	4	5
10.	When purchasing a mobile phone I feel uncertain as to product features that are particularly important for me. (AmbCnf_B)	1	2	3	4	5
11.	When purchasing a mobile phone, I need the help of sales personnel to understand differences between different models and brands of mobile phones. (AmbCnf_C)	1	2	3	4	5
	nake certain expectations from a brand and tend to on it. Please indicate what do you expect from your					-
	ted brand of mobile phone.  I do not trust this brand.	1	2	3	4	5
2.	(D1) I do not rely on this brand. (D2)	1	2	3	4	5
3.	This is not an honest brand. (D3)	1	2	3	4	5
4.	This brand is not safe to buy. (D4)	1	2	3	4	5

regul Pleas	end to build relationship with the brands we buy arly and become emotionally attached to them. e indicate below the extent of feelings of love and ions you have for your selected brand of mobile e.	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1.	I received considerable emotional support from this brand of mobile phone. (intimacy) (L1)	1	2	3	4	5
2.	My relationship with the chosen brand is intimate. (intimacy) (L2)	1	2	3	4	5
3.	There is something special about my relationship with this brand of mobile phone. (intimacy) (L3)	1	2	3	4	5
4.	I would rather own this brand of mobile phone than any other brand. (passion) (L4)	1	2	3	4	5
5.	I cannot imagine another brand of the mobile phone making me as happy as	1	2	3	4	5
6.	this brand. (passion) (L5)  I find myself thinking about this brand of mobile  There frequently during the day (passion) (L6)	1	2	3	4	5
7.	phone frequently during the day. (passion) (L6)  I have the impulse to buy from this brand at the	1	2	3	4	5
8.	sight of this brand of mobile phone. (passion) (L7)  I will continue to buy this brand when I need the	1	2	3	4	5
	mobile phone again. (commitment) (L8)  I am willing to recommend this brand of mobile	1	2	3	4	5
9.	phone to my friends. (commitment) (L9)  I feel that I can really trust this brand of mobile	1	2	3	4	5
10.	phone. (commitment) (L10)  This brand is my first choice when I	1	2	3	4	5
11.	buy the mobile phone. (commitment) (L11)					

phon	n you think of your selected brand of mobile e which of the following statements below best ribes your selected brand.	Strongly Disagree	Disagree	Neutral	Agree	Strongly
1.	Reliable (Img1)	1	2	3	4	5
2.	Durable (Img2)	1	2	3	4	5
3.	Useful (Img3)	1	2	3	4	5
4.		1	2	3	4	5
		1	2	3	4	5