

Understanding Dissonance and Dissonance Reduction: An Inference from Literature

Saloni Pandey
Research Scholar,
Dr. A.P.J. Abdul Kalam Technical University
Lucknow, India

Dr. (Prof.) Pooja Ahmad
Director,
Institute of Technology & Management,
Lucknow, India

Abstract: The theory of cognitive dissonance, primarily belonging to psychology has been successfully applied in various fields including consumer behavior. However, dissonance reduction which is an important affective aspect of the theory is a less explored area. The paper draws from the framework of 36 research papers and few books on how the understanding of cognitive dissonance evolved and what are the possible actions and behaviors explored by researchers which can lead to reduction in dissonance. The study has derived from the literature the ways of reducing dissonance that can be helpful for marketers for strategizing their promotions and customer support services. The dissonance can be reduced by seeking information, opinion change, suggestions and advice from reference groups, behavior/attitude change. However, there's a great scope to establish the ways of reducing cognitive dissonance through primary research. It can also be studied whether certain psychologically applicable ways such as adding new cognitions, and providing internal and external justification, for reducing dissonance are applicable in consumer behaviour as well.

Keywords:- Cognitive dissonance, dissonance reduction, psychology, consumer behavior, marketing strategies.

I. INTRODUCTION

“Festinger has developed an idea of considerable power and originality which is well supported by experimental evidence..... His theory of dissonance generates subtle, non-obvious predictions which cover a wide variety of phenomena that can be confirmed experimentally. This alone is a sizable achievement.

Albert Pepitone,
The American Journal of Psychology

Almost 60 years have passed since the theory of cognitive dissonance was first proposed by Leon Festinger (1957) in his book “A theory of Cognitive dissonance”. As per him cognitive dissonance is an uncomfortable psychological state which an individual feels when there is an inconsistency between his cognitions. He further said that this inconsistency is a motivation in its own right to reduce dissonance and achieve consonance. Egan et. al., (2007) states that, “cognitive dissonance is one of the most heavily studied phenomena in the history of psychology”. The theory has been a major development in the field of psychology and researchers have been constantly revising and studying the theory by applying it to the various areas of research including marketing.

A lot of research has been done in identifying the cognitive dissonance in the pre-purchase and post-purchase stages of consumer buying process, its importance, the factors causing the dissonance, and the implications it holds for the marketers. However, the most important role of cognitive dissonance in consumer behavior is after the purchase decision is made and according to Montgomery & Barnes (1993, cited in Salzberger & Monika, 2005), “very little research has been conducted with post-purchase dissonance.” Post-purchase dissonance with itself brings along a drive within the consumer to act or behave in a certain way so that he/she reduces or overcomes the dissonance and achieves consonance. There is a dearth of research in consumer behavior about how consumers reduce their post-purchase dissonance or what behavior or actions they take to reduce their guilt, regret or remorse after the purchase decision is made.

The paper is an attempt towards identifying the ways of reducing the cognitive dissonance after a decision is made, specifically in context of consumer behavior. It is an empirical paper which studies both the psychological studies as well studies based on cognitive dissonance in consumer behavior. The inference has been drawn from 36 papers and 6 books.

II. THEORETICAL BACKGROUND

First investigated by Leon Festinger (1957), cognitive dissonance arose out of a participant observation study by Festinger of a small group of people who believed that the earth was about to be destroyed by a flood. He also observed what happened to the group members – especially the really committed ones who gave up their homes and jobs to work for the group. The theory of cognitive dissonance by Festinger proposed that when an individual holds two or more cognitions i.e. things a person knows about himself, about his behavior and about his surroundings, that are relevant to each other but are inconsistent with one another, an unpleasant and uncomfortable state is created which is referred to as cognitive dissonance. Bem (1967) challenged the assumptions of the original theory and developed the notion of self-perception stating that dissonance is the discomfort caused by a threat to the self-concept which motivates individual to change their beliefs or behavior.

Aronson and his colleagues, (Aronson, 1968; Nel, Helmreich & Aronson, 1969 cited in Cooper & Fazio, 1984) observed that it was not inconsistency that intrinsically caused cognitive dissonance leading to changes in attitude, but it was the behavior inconsistent with the view of the self, threatening one's self-esteem that caused cognitive

dissonance. Unlike Festinger's dissonance theory which proposed that individuals are motivated to pacify inconsistent cognitions, Steele & Liu (1981, 1983) proposed that individuals are motivated to reduce dissonance because it threatens their positive self-image and their perception of global integrity.

As per Cooper & Fazio (1984), "The behavioral commitment produces consequences, and the perception of the foreseeability and aversiveness of those consequences determine the arousal of dissonance..... If this event (consequent) occur because of something for which the actor (individual) is responsible, then and only then will it lead to the state of dissonance. If the responsibility can be avoided by the actor by perceiving him/herself to have been coerced or by perceiving the aversive event to have been an unforeseeable consequence of his/her decision, then that event - no matter how aversive - will not lead to the state of dissonance."

III. DISSONANCE REDUCTION

Festinger (1957) stated that, "I am proposing that dissonance, that is existence of nonfitting relations among cognitions, is a motivating factor in its own right.... Cognitive dissonance can be seen as an antecedent condition which leads to activity oriented toward dissonance reduction just as hunger leads to activity toward hunger reduction." It is an uncomfortable psychological state which motivates the person to try to reduce the dissonance and achieve consonance. As per Wicklund & Brehm (1976), "To the extent that dissonance theory has evolved since 1957, the evolution has been primarily due to the discovery that responsibility is a pre-requisite for effects that we call dissonance reduction." They further state that, "Dissonance reduction takes place only when the dissonant elements have been brought together through the personal responsibility of the individual who experiences dissonance."

Through an example Greenwald & Davis (1978) try to explain that, a pair of two cognitions A (I believe X as X is the initial opinion), B (I agree to advocate not-X), is not sufficient enough to produce tension towards cognitive change. There are different pairs of cognitions as well such as C, (I caused the undesired consequence) and a self-concept cognition, D (I am an intelligent person who is not supposed to do such a stupid thing). Then it is possible to argue that drive to cognitive change is indistinguishable from ego defense. However, they say that in the original sense there is a possibility of dissonance-reduction effects but are weaker than the maintenance of self-esteem effects. The action-based model of dissonance by Harmon-Jones et al., (2009) proposes that dissonance reduction is an adaptive, approach-related process. The model presumes that any cognition has the ability to influence an individual's action or behavior (Harmon-Jones et al., 2015) and reducing dissonance by bringing dissonant cognitions into consonance facilitates the execution of unconflicted action (Harmon-Jones et al., 2009).

Festinger (1957) quoted, "The presence of dissonance gives rise to pressures to reduce or eliminate the dissonance. The strength of pressures to reduce the dissonance is a function of the magnitude of the dissonance". The theory furthers that to manifest the pressures to dissonance, there are certain possible ways in which existing dissonance can be reduced or eliminated by bringing consonance between two dissonant elements.

It can be done by:

- **Changing behavioral cognitive elements** which is easy and can be frequently modified.
- **Changing an environmental cognitive element** where there is a certain degree of control over the environment.
- **Adding new cognitive element** to reduce the total magnitude of dissonance.

Festinger (1957) explains that an emotional reaction at all times may not be under the conscious control of a person and thus the person may fail to change it. It may also be the case that the new behavior required to reduce the dissonance "may not be in the behavior repertory of the person". Festinger (1957, as cited in Stein, 1992) gave one of the ways of reducing dissonance by establishing cognitive overlap among the alternatives by viewing them as being more or less the same. Kemper (2001, as cited in Sandlin & Callahan, 2009) argues that emotional dissonance can work as a catalyst for a social change which may be long lasting. Balcetic & Dunning (2007, as cited in Harmon-Jones et al., 2011) explains through an example that individuals who try to reduce dissonance may seek to perceive aversive environment to be less aversive so that by doing so it assists them in acting upon that environment.

Reducing or eliminating dissonance by changing the cognitive elements depends upon the resistance to change the cognitive elements. The maximum dissonance that can possibly exist between any two elements is equal to the total resistance to change of the less resistant element. The magnitude of dissonance cannot exceed this amount because, at this point of maximum possible dissonance, the less resistant element would change, thus eliminating the dissonance. Since the inception of the theory, there have been many direct and indirect, experimental and empirical researches about reducing or overcoming dissonance. The plethora of researches on reducing dissonance indicates many modes which are effective in reducing dissonance. There are some experimental paradigms which evaluate the research conducted on dissonance over the decades since the inception of the theory and constitutes majority of the tests of dissonance theory.

- **Free Choice:** In a state of dissonance, the change in attitude is expected to occur towards that cognition which is most resistant to change. After deciding on an alternative, an individual's experience of dissonance is more, when the number and importance of cognitions favoring the rejected alternatives i.e. dissonant cognitions is higher, and /or the number and importance of cognitions favoring the chosen alternative i.e. consonant cognitions is lower. The extent of dissonance experienced also depends on the attractiveness of the alternatives. If

the alternatives are closer in attractiveness, dissonance experienced is greater and vice versa. The first Free Choice experiment was conducted by Brehm (1956), wherein the participants had to make either an easy decision (in which the two alternatives are very different in their attractiveness) or a difficult decision (in which the alternatives were very close in attractiveness). The result showed that after an easy decision was made the attitude change towards the alternatives was not observed. However, after making a difficult decision, there was a negative attitude towards the rejected alternatives and slightly positive attitude towards the chosen alternative. Frey et.al. (1984) also found through an experiment that to resolve their dissonance participants change the attractiveness of the alternatives. Thus dissonance caused by a decision between alternatives can be reduced by changing the attitudes towards the alternatives to be more consistent with the decision. This method of reducing dissonance has been referred to as “spreading the alternatives”. He also explored whether cognitive overlap practically made any difference in dissonance reduction. However, apart from attitude change Brehm & Cohen (1962) gave some other ways or modes of reducing dissonance as well, such as: (i) opinion change, (ii) seeking or recall consonant information, (iii) behavioral change, (iv) perceptual distortion, and (v) avoidance of dissonant information. Harmon-Jones et. al. (2011) found that individuals who are high on trait behavioral approach sensitivity (BAS) engage more in reducing dissonance by spreading of alternatives.

- **Induced/Forced Compliance:** When a person’s behavior or action is contrary or inconsistent with his preexisting attitude he is likely to be in a state of dissonance. Festinger & Carlsmith (1959) conducted an experiment for affirming the ways of reducing dissonance through cognitive consequences of forced compliance. The participants were asked to do a boring task of turning a series of wooden pegs. After the task some of them were offered \$20 and other \$1 to tell another participant that the task was interesting. Festinger & Carlsmith (1959) reasoned that lying to the fellow participant for \$20 should not arouse much dissonance as it provides sufficient justification for the behavior contrary to attitude. And as \$1 was just enough justification for the behavior it adds less consonant cognition than \$20. As reasoned the results showed that in \$1 condition participants changed their attitude to be more positive towards the task and in \$20 condition, there was no attitude change. This paradigm is a proof in arousing dissonance and encouraging dissonance-reducing attitude change. Harmon-Jones et. al. (2011) found in their study through induced compliance that individuals with high BAS to attitudes leads to counterattitudinal behavior in high choice conditions than in low choice conditions.
- **Effort Justification:** To obtain some desirable outcome, when a person engages in an unpleasant activity and the cognitions for that activity is dissonant with engaging in that activity, the dissonance is aroused. Aronson & Mill (1959) conducted the first experiment where women had to undergo severe and mild “initiation” to become a member of a group. The group proved to be dull and

boring and the women in severe initiation condition changed their attitude favorably toward the group than the women in mild initiation condition. This paradigm was tested by many researchers (Beauvois & Joule, 1996; Harmon-Jones & Mill, 1999; Olson & Stone, 2005; Cooper, 2007) and all observed fruitful results. In his theory Adam Kowol explains external and internal justification as a way of reducing dissonance. Almost like Changing Environmental Cognitions- a mode given by Festinger (1957) Kowol says that an individual reasons or explains his/her dissonance as not because of himself/herself but rather by the external situations such as politeness, praise or reward. This is external justification. Internal justification is reducing the dissonance by changing something about oneself such as attitude or behavior like Changing Behavioral Cognitions- one of the modes by Festinger (1957). Aronson (2004) affirms this by stating that if external justification for a particular dissonance is difficult the individual will justify it internally by making his/her attitude consistent with the cognitions.

- **Information Seeking:** In contrast to Brehm & Cohen (1962) and to Festinger’s (1957) hypothesis that in addition to trying to reduce dissonance, an individual will actively avoid situations and information which would likely increase dissonance, Wicklund & Brehm (1976) brought into notice that it is difficult to obtain evidence for selective avoidance of dissonance-arousing information. Frey (1981) conducted an experiment to explore the resolution of cognitive dissonance through a post-decisional information seeking paradigm. He postulated that after the decision has been made individual tend to seek further information which is expected to be consonant and avoid information which tends to be dissonant. However Frey (1982) found that after a decision is made if the participant is relatively certain to revise his/her decision, then in such a case there is not always a possibility of seeking consonant information. O’Keefe (2002) stated that in general, if individuals seek only those media sources that confirm or reinforce their prior beliefs, then the powerful mass media effects are blunted. However, Kowol in his theory of cognitive dissonance says that after making a decision if an individual is plagued with regrets or second thoughts he/she will automatically seek information that will clear their doubts and proves their decision right.

Table 1: Ways of Reducing Dissonance in Psychology

S.No.	Year	Author	Ways
1.	1957	Festinger	Changing behavioural cognitive element, Changing environmental cognitive element, and adding new cognitive element.
2.	1959	Festinger & Carlsmith	Attitude Change
3.	1959	Aronson & Mill	Effort justification
4.	1962	Brehm & Cohen	Opinion Change, Seeking or recall consonant information, Behavioral change, perceptual distortion, and avoidance of dissonant information
5.	1981	Frey	Information seeking
6.	1984	Frey et. Al.	Changing the attractiveness of the alternatives
7.	2004	Aronson	Effort justification
8.	2011	Harmon-Jones et. Al.	Spreading of alternatives, counter-attitudinal behaviour

IV. DISSONANCE REDUCTION IN CONSUMER BEHAVIOR

From the marketing/consumer behaviors' point of view, several researchers have worked on the theory of cognitive dissonance. Oliver (1997) applied the view of cognitive dissonance over the entire purchase decision process from pre-purchase to post-purchase. Emphasizing the importance of dissonance in consumer behavior, Straits (1964) states that it is more important for the manufacturers and companies to understand a dissonant consumer than to understand a decision-making consumer. According to Salzberger & Monika (2005) dissonance turns out to be essential factor leading to the formation of satisfaction. They found that about 10% of their respondents are likely to develop considerable level of dissonance which will not self-dissolve but rather requires clearly defined marketing activities.

According to John Egan (2007), the cognitive dissonance in marketing terms is most likely to occur after a purchase has been made by a consumer as all the purchases involves some form of self-justification particularly in purchases which involves high monetary and emotional costs. Gbadmosi (2009) suggested three main conditions which can lead to arousal of dissonance after purchasing a product: purchase decision must be important in terms of financial and psychological involvement and it should be personally relevant for the purchaser; the consumer must have the freedom to choose from the alternatives available, finally; there must be irreversibility in the decision involvement.

Many researchers have identified the modes that consumers might use to reduce their dissonance more specifically after purchase. Oshikawa (1969) proposed that seller's advertisement about the product emphasizing its desirable features and benefits, reassures the consumer as to the wisdom of purchase and thus him/her to reduce the post-purchase dissonance. Hunt (1970) mentioned the importance of post-purchase communication in reducing dissonance after the purchase decision is made. He quoted, "The existence of possible post-purchase feelings indicates the marketer might benefit from directing some of his communications to the recent buyer, rather than all of them to the potential buyer."

According to Smith (1993) to address the consumers' post-purchase dissonance the sellers' should reassure them with a congratulatory note, after sales-services, some additional advertising, and the best of all the product/service should match up to the promise made in the advertising. Soscia, Bussaca & Pitrelli (2008) also mentioned that post-purchase messages help consumers decrease their guilt after making a large purchase. If marketers want to help consumers in reducing cognitive dissonance, Bawa & Kansal (2008) suggested that the marketer should offer strong guarantees or warranties, the number and effectiveness of customer service should be increased, and they must provide detailed brochures of the product correctly. Esfidani (2014) suggested how relationship marketing can be used to reduce post-purchase cognitive dissonance. This brings home the point that marketers can play a major role in reducing consumers' dissonance. Consumers facing post-purchase dissonance seek consonant information or information in favor of their purchase to reduce their dissonance, therefore a marketer must cater to provide post-purchase services, messages and information. Researchers (Van Dyke, 1966; Hunt, 1970; Donnelly & Ivancevich, 1970, as cited in Cummings & Venkatesan, 1976) also worked on approaches that used post-purchase reinforcement techniques to reduce the consumers' dissonance after they have purchased major products like automobile. Duhacheck (2005) found 36 ways items categorized into 8 dimensions by studying post-decisional behaviour in stressful consumption episodes. These 8 dimensions are action, rational thinking, emotional support, instrumental support, emotional venting, avoidance, positive thinking and denial. Zameer & Devasagayam (2015) found that for the Indian consumers safely keeping the receipt after purchase is very important and the companies can use it as an important dissonance reducing measure by assuring the customer that apart from receipt there are other mechanisms also such as permanent sticker on the product with purchase date, invoice number and customer service telephone number mentioned.

For reducing dissonance consumers also look at the groups for social acceptance and verbal interaction to evaluate their product after purchase. Students to a large extent rely on their reference groups regarding their purchases (Park & Lessig, 1977; Bearden & Etzel, 1982,

cited in J Graff et. al., 2012). To reduce their cognitive dissonance after purchase consumers resort to justifying the cost of the product (Wen-Bin & Chin- Sheng, 2007); the role of sales staff (Soutar & Sweeney, 2003) is a major determinant in dissonance reduction; consumers use justification of higher income levels to justify consumption of immoral or costly goods (Ostling, 2009). J. Graff et. al., (2012) in their study concluded that the less post-purchase

cognitive dissonance respondents feel, the less they are dependent on others' comments and opinions. Cummings & Venkatesan, (1976) asserts that after an individual has made a purchase decision there are several modes that he/she can use to reduce dissonance and it is very likely that an individual might use more than one or modes available to him/her. And thus it becomes very difficult to predict which mode/modes the individual will use.

Table 2: Ways of Reducing Dissonance in Consumer Behavior

S.No.	Year	Author	Ways
1.	1969	Oshikawa	Sellers' advertisement
2.	1970	Hunt	Post-purchase communication, Reinforcement techniques
3.	1993	Smith	Congratulatory note, After sale-services, Additional advertising, Product/service should match the promise made in advertising
4.	2003	Soutar & Sweeney	Role of sales staff
5.	2005	Duhachek	Action, Rational thinking, Emotional support, Instrumental support, Emotional venting, Avoidance, Positive thinking, Denial
6.	2007	Wen-Bin & Chin-Sheng	Justifying the cost of the product
7.	2008	Bawa & Kansal	Strong guarantees and warranties, Effective customer service, detailed brochures
8.	2008	Soscia, Bussaca & Pitrelli	Post-purchase messages
9.	2009	Ostling	Justification of higher income levels
10.	2012	Park & Lessig, 1977; Bearden & Etzel, 1982, (cited in J Graff et. al., 2012).	Reference group for social acceptance and verbal interaction
11.	2014	Esfidani	Relationship marketing
12.	2015	Zameer & Devasagayam	Convincing majorly used by Indian customers

V. OVERALL EVALUATION

Since its inception the theory of cognitive dissonance has been revisited by many authors and researchers. Its evolution has been great and splendid. From "inconsistency between cognitions leading to an uncomfortable psychological state" it is now being defined as a psychologically uncomfortable state caused by behavioral commitments which lead to an aversive and irrevocable consequence for which the concerned individual feel responsible. The changes in the meaning and definition of cognitive dissonance has also brought changes into the causes of its arousal and how an individual is supposed to reduce his/her dissonance. Dissonance reduction, which meant reducing psychological inconsistency, has been now called as an adaptive approach-related process, which is driven by the threat to the self-image and integrity of an individual. Maintaining his/her self-concept and ego defense motivates an individual to reduce the dissonance among cognitions which poses a threat to his/her perception of an ideal self.

There have been many disagreements about the nature and causes of cognitive dissonance and/or the reasons which motivates an individual to reduce his/her dissonance. However, one thing to which all the authors and theologians believe is that reducing dissonance is the ultimate idea of the whole theory and there are certain modes/ways that individuals follow for reducing their cognitive dissonance. Right from the times of Festinger the theory has been following the notion of ways of reducing dissonance. When

we apply the theory to the concept of consumer behavior, the ways of reducing dissonance given by various researchers is easily identifiable in respect of consumers as well. The changes in the behavioral cognitive element or bringing changes in the attitude and behavior is one of the easiest ways of reducing dissonance. Indian consumers are habitual in self-convincing themselves to overcome dissonance. Attitude change, be it through the spreading of alternatives or forced compliance is an encouraging way of reducing dissonance. If we look closely to the effort justification specifically, internal justification we will find that it is also basically changing your thoughts and attitude.

Seeking information through external sources to reinforce the decision made and negative information about the rejected alternatives to feel about the choice is one of the majorly used ways of reducing dissonance in consumer behavior. However, digging deep into it brings us to the conclusion that seeking information is eventually leading to changes in the attitude of the customer towards the product or the choice made. Thus, changing attitude and/or behavior is one of the most effective and influential way of reducing dissonance. Changing environmental cognitive element is possible only when the customer has a certain degree of control over the environment, which is rarely possible. Keeping a receipt or a proof of purchase made, and the assurance of after sale services also plays a role in reducing dissonance among Indian consumers. Seeking external support such as acceptance and verbal interaction with a

reference group is also one of the most effective ways of dissonance reduction among consumers.

To reduce the total magnitude of dissonance, consumers face after the purchase decision, they add new cognition to either side of the tension and this is also possible through seeking new information, interacting with the family, peers and other reference groups about the choice made and the other alternatives. By understanding the measures consumers can use in reducing their cognitive dissonance particularly after purchase can help the marketer in delivering consumer satisfaction, create customer loyalty, encourage repeat purchases and strengthen the word of mouth recommendations. They can do so by devising marketing strategies which supports customers' choice of the concerned product, such as: directing the advertisement towards the customers who have already made the purchases, focusing on providing information to consumers about product's unmatched benefits and features through brochures, sending congratulatory messages along with the assurance of after sale services.

VI. CONCLUSION

The theory of cognitive dissonance has been extensively applied and used in the area of consumer behavior for understanding the factors and causes of dissonance and how can marketer work on it to their benefit. However, little has been explored as to how the consumers stuck in the state of dissonance, try to reduce it to achieve consonance in such a practical place like a market. Consumers may use any of the modes/ways of reducing dissonance, such as changing one's attitude or behavior, changing their opinion, seeking consonant information, avoiding dissonant information, adding new cognitions through enhancing one's knowledge about the product or brand, and seeking acceptance and interaction from reference groups. In the present market scenario and given the importance of consumer behavior, there are many other ways of reducing post-purchase dissonance available to the consumer such as exchanging or returning the product; seeking redressal through consumer courts, not opting to make repeat purchases of the same product or from the same store or brand, and the justification of cost of the product or higher income levels.

The study is a conceptual attempt to understand dissonance reduction; however more studies are required to understand what actions and ways consumers use in the real life situations to reduce their post-purchase dissonance. Future research may also seek to study if certain psychologically applicable ways of dissonance reduction such as external or internal justification; adding new cognitions to either side of the tension and; perceptual distortion can actually be used by the customers in reality.

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