Overview

The purpose of this chapter is to describe the research methodology. The chapter is divided into nine sections (1) Objectives of the study, (2) Hypothesis, (3) The Element, (4) Research Design, (5) Data Source, (6) Experimental Stimulus, (7) Sampling Method, (8) Sample Size and (9) Measures.

3.1 Objective of the Study:

The study would like to explore several issues regarding created animated spokes-character in Indian television advertisements of FMCG products, still very petite contribution has been witnessed by the experts of the industry and academician. Hence, the main objective is to study, examine and investigate the impact of determinants on purchase intention of youngsters for FMCG products viewing television advertisement with created animated spokes-characters.

3.1.1 Sub – Objectives of the study:

1. To investigate the impact of cognitive responses of youngsters for FMCG products i.e. Product / Message thoughts, Source Oriented thoughts and Ad Execution thoughts of television advertisement with created animated spokes-characters on Attitude towards advertisement and Attitude towards brand.

2. To investigate the impact of Attitude towards television Advertisement with created animated spokes-characters on Purchase Intention of youngsters for FMCG products.

3. To investigate the impact of Attitude towards Brand of television advertisement with created animated spokes-characters on Purchase Intention of youngsters for FMCG products.

4. To investigate the impact of Attitude towards Brand of television advertisement with created animated spokes-characters as a mediator between Attitude towards Advertisement and Purchase Intention of youngsters for FMCG products.

5. To study the relationship between demographic variables of youngsters and purchase intention and also the determinants of purchase intention for FMCG products viewing television advertisement with created animated spokes-characters.
3.2 Hypothesis

3.2.1 Cognitive responses

A basic assumption in using the cognitive response approach to studying communication effects is that the spontaneous thoughts generated by the message recipients causally mediate the affective reactions to a persuasive message. The assumption that cognitive responses precede and influence the formation of attitudes and intentions has been made in most cognitive response studies and has been directly tested in several investigations (Osterhouse and Brock, 1970; Petty and Cacioppo 1977; Cacioppo and Petty, 1979). Also, Wright (1973) suggested that consumer acceptance of advertising was mediated by the cognitive responses generated by message recipients rather than by the content of the ad itself.

Furthermore, Burton and Lichtenstein (1988) suggested that cognitive components have the effect on Attitude towards the advertisement rather than affective components and evidence in support of this was offered by the strong relationship between cognitive response and attitude in the multiple-exposure conditions (Belch, 1982).

Belch (1982) also suggested that cognitive responses mediate post message attitudes and purchase intentions. It also suggested that cognitive response models were capable of explaining a significant amount of variance in attitude and purchase intention and also offered further support for the viability of using thought verbalization data in studying communication effects and identified three basic categories of cognitive responses i.e. product / message thoughts, source – oriented thoughts and ad execution thoughts.

3.2.1.1 Product / message thought

Some researchers have emphasized the role of a respondent’s product and message thought as the central mediator of attitude change (Greenwald, 1968; Petty & Cacioppo, 1981, 1986). Generation of favorable thoughts during advertisement exposure is expected to create a positive attitude change while unfavorable thoughts result in resistance to persuasion. Petty and Cacioppo (1981, 1986) delineated the Elaboration Likelihood Model (ELM) and Chaiken (1979) and later Chaiken, Liberman, and Eagly (1989) the heuristic and systematic information processing model which showed that attitudes are expected to be influenced by message related information processing i.e. for advertising these translate to product / message related thoughts.
According to Mehta (1994), product / message thought leads directly to brand attitude which, in turn, influences buying intentions. Further, attitude formed or changed as a result of product / message thought are apt to be more permanent and resistant to change. Thus, it is hypothesized\(^{12}\) that

\[ H_1: \] Product / Message thoughts of created animated spokes character’s advertisement has significant influence on over his / her attitude towards the brand.

\[ H_{16}: \] Consumer’s attitude towards brand mediated the relationship between product related thoughts and his/her intention to purchase the advertised product

### 3.2.1.2 Source Oriented Thought

This cognitive response is directed at the source of the communication. Where, the thoughts about the source might be negative which lead to reduction in attitude formation or positive thoughts which lead to increase acceptance of the message, which are known as source related thought. Herbert Kelman developed three basic categories of source attributes i.e. credibility, attractiveness and power / likeability (Kelman, 1961) and suggested that each attribute influences the recipient’s attitude or behavior through different process. Thus, in source oriented thought three variables are considered in this study i.e. source related thoughts, source credibility and source likeability.

#### 3.2.1.2.1 Source related thought

Chaiken (1980) studied the effect of source factors in persuasion and also showed source related thought to be important influences in attitude formation (Chaiken 1980). Thus, it is hypothesized that

\[ H_2: \] Created Animated Spokes - Character related thoughts have significant influence on over his / her attitude towards the ad.

\[ H_3: \] Created Animated Spokes - Character related thoughts have significant influence on over his / her attitude towards the brand.

\(^{12}\) The hypothesis are sequenced on the basis of flow of theoretical framework model
3.2.1.2.2 Source credibility

Source credibility research provides the understanding of which created spokes – characters can be more or less effective. By definition, source credibility defined as, “a communicator’s positive characteristics that affect the receiver’s acceptance of a message” (Ohanian, 1990, p. 41). Hovland, Janis and Keller (1953) popularized the term “source credibility” by concluding that perceived expertise and trustworthiness were inherent in the concept of source credibility, where expertise defined as “an individual’s superior ability to solve problems in a given area” and trustworthiness was defined as “the degree of confidence that respondent has in the communicator’s intentions and ability to make valid assertion” (Hovland et al., 1953). In addition to this, McGuire (1985) has defined source attractiveness in “Source Valence” model which refers to the perceived attractiveness of the source (Kahle and Homer, 1985; Ohanian, 1991; Kamins, 1990). In fact, Ohanian (1990) adapted two components from this “Source credibility model” and one component from “Source Valence model” and developed tri-component scale to measure source credibility i.e. Source expertise, trustworthiness, and attractiveness.

Trustworthiness

The use of the word “trustworthiness” in the literature of celebrity endorsement refers to honesty, integrity and believability of an endorser (Erdogen, 1999). Celebrity needs to be trustworthy when endorsing a product or a service (Schiffman and Kanuk, 2004). However, Ohanian (1990) states that when a celebrity is perceived more trustworthy, the message will be more effective and the receiver will be more integrated.

In summary, the more credibility a celebrity endorser enjoys, the better the image of the brand that he/she endorses can be created. Since, credibility has proved to have significant and direct effect on attitudes and behavioral intentions; it is not the only factor that should be considered when selecting celebrity endorsers (Erdogan, 1999). Thus, it is hypothesized as,

H₄: Created Animated Spokes - Character trustworthiness have significant influence on over his / her attitude towards brand.
H₅: Created Animated Spokes - Character trustworthiness have significant influence on over his / her attitude towards advertisement.

**Attractiveness**

Attractiveness was defined in terms of facial and physical attractiveness (Baker & Churchill, 1977; Patzer, 1983; Caballero & Soloman, 1984) and later was operationalised in terms of model attractiveness (Baker & Churchill, 1977; Kahle & Homer, 1985), sexiness (Steadman, 1969) or sexuality and liability (Maddux & Rogers, 1980). A research body in advertising and communication proposed that physical attractiveness as an important cue in an individual’s initial judgment of another person (Baker & Churchill, 1977; Chaiken, 1979; Joseph, 1982; Kahle & Homer, 1985).

However, the level of attractiveness can influence not only advertising evaluation and behavioral changes, but also the other components of source credibility such as expertise and trustworthiness, and liking towards the endorser (Patzer, 1983). Thus, it is hypothesized as,

H₆: Created Animated Spokes - Character attractiveness have significant influence on over his / her attitude towards brand.

H₇: Created Animated Spokes - Character attractiveness have significant influence on over his / her attitude towards advertisement.

**Expertise**

By definition, Hovland *et al.* (1953) states expertise as the “extent to which a communicator is perceived to be a source of valid assertions and refers to the knowledge, experience or skills possessed by an endorser”. In addition to this, expertise of a celebrity endorser should relate to the product he/she endorses (Till & Busler, 1998). By using the internalization process, Friedman and Friedman (1979), concluded that consumer purchase complex and expensive products which were endorsed by experts. Ohanian (1990) states that the perceived expertise of celebrity endorser is more important in explaining purchase intentions rather than their attractiveness and trustworthiness. Thus, it is hypothesized as,
H₈: Created Animated Spokes - Character expertise have significant influence on over his / her attitude towards brand.

H₉: Created Animated Spokes - Character expertise have significant influence on over his / her attitude towards advertisement.

In the advertising literature as well, endorser perceived credibility has received considerable attention (Friedman & Friedman, 1979; Atkin & Block, 1983; Ohanian, 1990, 1991; Goldsmith, Lafferty & Newell, 2000). Some studies concluded that trustworthiness is the most important dimension of credibility of source (Hovland & Weiss, 1951 – 52; Friedman & Friedman, 1979; McGinnis & Ward, 1980; Atkin & Block, 1983; Kamins et al., 1989). Other studies emphasized on expertise (Maddux & Rogers, 1980; Ohanian, 1991; Chawla, Wilson & Sherrell, 1993; Dave & Barr, 1994) and some other studies supported attractiveness (Baker & Churchill, 1977; Chaiken, 1979; Patzer, 1983; Kahle and Homer, 1985; Caballero et al., 1989; Silvera & Austad, 2004). In this research, authors had used the scale developed by Ohanian (1990) by using all three dimensions.

Abundant studies support that perceived source (i.e., spokesperson) credibility influences attitudes and behavioral intentions (e.g. Miller & Baseheart, 1969; Warren, 1969; Sternthal, Dholakia & Leavitt, 1978; Harmon and Coney, 1982; Wu and Shaffer, 1987; Moore Hausknecht & Thamodaran, 1988). In addition, it was also founded that endorser credibility as an important antecedent to an individual’s attitude towards an advertisement and advertising effectiveness (Sternthal, Dholakia & Leavitt, 1978; Lutz et al., 1983; Ohanian, 1990; Lafferty et al., 2002).

Petty and Cacioppo (1986) provided Elaboration Likelihood Model (ELM) and founded that endorser serves as a cue during peripheral processing. Peripheral processing in turn is associated with consumer's attitude toward the advertisement. In other words, if consumers perceive the endorser to be credible, they will have a more positive attitude toward the advertisement. In the same line, the study by Lafferty and Goldsmith (1999) showed that endorser credibility have an influential effect on attitude towards ad, in the context of Attitude towards Ad → Attitude towards brand → Purchase Intention.
Many research shows that endorsers source credibility leads to react positive towards brand (e.g., Woodside & Davenport, 1974; Fishbein & Ajzen, 1975; Craig & McCann, 1978; Mitchell & Olson, 1981; Atkin & Block, 1983; Goldberg & Hartwick, 1990). Further, according to Elaboration likelihood Model (ELM), when consumer are more motivated to centrally process an ad, the brand relevant aspects increase and the peripheral cues decrease (Petty & Cacioppo, 1983). The direct relationship of corporate credibility and attitude towards brand was confirmed in the studies (Lafferty & Goldsmith, 1999; Goldsmith et al., 2000).

Admittedly, it was demonstrated across multiple studies that likeable spokes – characters in advertisement have the ability to increase the likelihood of purchase intention (Stewart & Furse, 1986; Callcott & Alvey, 1991; Urde, 1994; Callcott & Phillips, 1996). In addition to this, Guido and Peluso (2009) investigated that animated spokes - character stimulate purchase intention only when the advertised product is matched to the attractiveness sub-dimension of perceived credibility. Newell (1993) and Davis (1994) founded positive effect of corporate credibility on attitude towards advertisement, attitude towards brand and purchase intention. This empirical evidence is consistent with studies of Lafferty and Goldsmith (1999) and Goldsmith et al. (2000) showed direct relation between credibility and purchase intention. Having evidences of mediating effect among credibility and purchase intention, it is hypothesized that,

H$_{17}$: Consumer’s attitude towards brand mediated the relationship between trustworthiness and his/her intention to purchase the advertised product

H$_{18}$: Consumer’s attitude towards advertisement mediated the relationship between trustworthiness and his/her intention to purchase the advertised product

H$_{19}$: Consumer’s attitude towards brand mediated the relationship between attractiveness and his/her intention to purchase the advertised product

H$_{20}$: Consumer’s attitude towards advertisement mediated the relationship between attractiveness and his/her intention to purchase the advertised product

H$_{21}$: Consumer’s attitude towards brand mediated the relationship between expertise and his/her intention to purchase the advertised product
H$_{22}$: Consumer’s attitude towards advertisement mediated the relationship between expertise and his/her intention to purchase the advertised product

3.2.1.2.3 Source Likeability

Admittedly, it was demonstrated across multiple studies that likeable spokes – characters in advertisement have the ability to increase the likelihood of purchase intention (Stewart & Furse, 1986; Callcott & Alvey, 1991; Urde, 1994; Callcott & Phillips, 1996). Although, applied studies have suggested that liking of an ad may be one of the best indicators of advertising effectiveness (Brown & Stayman, 1992). Thus, it is hypothesized that

H$_{10}$: Created animated spokes – character likeability has significant influence over his / her attitude towards advertisement.

H$_{11}$: Created animated spokes – character likeability has significant influence over his / her attitude towards brand.

3.2.1.3 Ad execution thought

Many researchers had paid greater attention to respondent evaluation of ad – execution style and to other responses pertaining to ad execution (e.g. Lutz & MacKenzie, 1982; Lutz et al., 1983). Petty and Cacioppo (1981, 1986) delineated the Elaboration Likelihood Model (ELM) and Chaiken (1980) and later Chaiken, Liberman and Eagly (1989) the heuristic and systematic information processing model which showed that attitudes are expected to be influenced by non-message i.e. for advertising these translate to ad execution related thoughts. Mehta (1994) elaborated that ad execution thought leads to Ad attitude which, in turn, may influence brand attitude as well as buying intentions. It has been found that when advertising execution thought is high and advertising product / message thought is low, antecedents of attitude towards the ad would be dominant in influencing brand attitude and the influence of product / message thought on brand attitude may be minimal (MacKenzie & Lutz, 1989; Muehling, Laczniak & Stoltman, 1991).

Shimp (1981) conceptualized Aad as consisting of a cognitive and an affective dimensions, where cognitive dimension (i.e. Ad Execution Related Thought) was seen as a result of conscious processing of specific executional elements in the ad (e.g.,
evaluation of execution, copy, endorser, presentation style, etc.) and these dimensions underlying Aad may have a differential impact on important consequences such as attitude towards the ad and/or purchase intention (Shimp 1981; Batra & Ray 1985). Furthermore, Mehta (2000) states that consumer attitudes toward advertising are one factor that is used to indicate advertising effectiveness because a consumer’s cognitive ability towards the advertising reflects the consumer’s thoughts and feelings that will impact on attitudes toward advertising (MacKenzie & Lutz, 1989). As well as the Advertising Research Validity Project (ARF/CRVP) (Haley & Baldinger, 1991) gave empirical evidence that ad executional elements are valid measures for ad effectiveness (Biel & Bridgwater, 1990). Thus, it is hypothesized that

H$_{12}$: Ad execution thoughts of created animated spokes character’s advertisement has significant influence on over his/her attitude towards the ad.

H$_{23}$: Consumer’s attitude towards advertisement mediated the relationship between Ad execution related thought of created animated spokes character’s advertisement and his/her intention to purchase the advertised product

### 3.2.2 Attitude towards advertisement

A direct relationship between attitude towards advertisement and purchase intention were found under conditions of low involvement when cognitive and affective responses are evoked (Chaiken, 1979; Gorn, 1982; Petty, Cacioppo & Goldman, 1981; Batra & Ray, 1985). Cox and Locander (1987) show a model of advertising effects and present evidence that attitude towards advertisement is directly related to purchase intention for both familiar and unfamiliar products (Homer, 1990; Phelps & Hoy, 1996; Goldsmith et al., 2000). Admittedly, Mehta and Purvis (1997) describe an Advertising Response Modeling approach to measuring advertising effectiveness that also explicitly shows this direct link. Thus, it is hypothesized that

H$_{13}$: Consumer’s attitude towards advertisement has significant influence over his/her attitude towards brand.

H$_{14}$: Consumer’s attitude towards advertisement has significant influence over his/her intention to purchase
3.2.3 Attitude towards Brand

Many studies found that attitude towards brand to have a positive and significant effect on purchase intention (Mitchell & Olson, 1981; Shimp & Gresham, 1985; Batra & Ray, 1986; Phelps & Hoy, 1996). Many other studies have found out positive effects of attitude towards brand on purchase intention when familiar and unfamiliar brands were tested. (e.g., Shimp & Gresham, 1985; Batra & Ray, 1986; Homer, 1990; Brown & Stayman, 1992; Homer & Yoon, 1992; Phelps & Hoy, 1996). Thus, it is hypothesized that

H15: Consumer’s attitude towards brand has significant influence over his/her intention to purchase

3.2.4 Purchase Intention

Majority of the findings suggested that there can also be an indirect relationship between attitude towards advertisement and purchase intention through attitude towards brand, as it will appear when the consumer develops a positive attitude towards advertisement which leads him or her to form attitude towards brand before starting to build a positive purchase intention (Shimp & Gresham, 1985; Mackenzie, Lutz & Belch, 1986; Brown & Stayman, 1992; Yoon et al., 1998). Shimp & Gresham (1985) found out that attitude towards advertisement had both the direct effect on purchase intention and the indirect effect through attitude towards brand. In addition, the causal sequence of (attitude towards advertisement → attitude towards brand → purchase intention) relationship explored in the previous studies considered attitude towards brand as a mediator in the relationship between attitude towards advertisement and purchase intention (Mechleit et al., 1988; Heath & Gaeth 1994; Phelps et al., 1996) and also suggested that the order of effects appears to be robust (MacKenzie et al., 1986; MacKenzie & Lutz, 1989; Homer, 1990; Brown & Stayman, 1992). Thus, it is hypothesized as

H24: Consumer’s attitude toward brand acts as a mediator between Consumer’s attitude toward advertisement and his/her intention to purchase the advertised product.

3.3 The Element

In order to study variables impacting purchase intention with created animated spokes – character in television advertisement, consumer’s information is required. But to minimize hypothesis guessing, Hindi television advertisements containing only created
animated spokes – character were shown to the youngsters falling between the ages of 13 to 35 years (National Youth Policy, 2003; National Youth Readership Survey, 2009), as television is the most preferred source of information and as a preferred leisure activity among the young consumers (National Youth Readership Survey, 2009). Some previous studies also address that the spokes – character in advertisements effect on youth (Van & Lonial, 1985; Hoy, Young & Mowen, 1986) and Kelly et al. (2000) also concluded that to appeal youth market, advertiser should use animated spokes – characters rather than human spokesperson. According to National Youth Readership Survey by NACER (2009), Hindi with 38.5 per cent followed by Marathi (10.5 %) and Tamil (9 %) had emerged as the three most preferred language among youth and youth population in India (13-35 years) constituting 38 per cent of the total population of the country and expected to reach 574 million by 2020. According to Census 2011, Gujarat with population of around 60 million stands at 10th rank amongst the states in the country with around 18.1 million television sets and around 4.7 per cent of Gujarat’s population has reported Hindi as their first language. From the popularity of Hindi Cinema and Hindi Television Channels it is inevitable that Hindi is among the most used language in Gujarat. Thus, for studying the variables impacting purchase intention with created animated spokes character in television advertisement can be better assess through experiment survey of youngster of Gujarat state by showing them Hindi created animated spokes character television advertisement.

3.4 Research Design

A research design is a master plan that specifies the method and procedure for collecting and analyzing the needed information; it is a framework for the research plan of action (Zikmund, 2004, pp. 58). This research begins with exploratory research design as its immediate purpose is to develop hypothesis and questions for further research (Cooper & Schindler, 2007, pp. 139-140). The formal study begins after the exploration leaves off.

For making the study conclusive after exploratory research, causal research design is used. It uses to obtain evidence of cause – and – effect relationships. It requires a planned and structured design to understand which variable are the cause (independent variable) and which variables are the effect (dependent variables) and determine the nature if relationship between the causal variable and the effect to be predicted (Malhotra & Dash, 2009, pp. 89). Thus, to understand the impact of television advertisement with created animated spokes characters on purchase intention and its other constructs, it is essential to
develop some similar viewing experience among all the respondents because the responses may vary on the basis of respondents’ recall ability, opinion about product and brand endorsed, and effect of surrounding conditions while viewing etc. The effect of this type of extraneous variables can be minimized by experimental research design (Viswanathan, 2005; Malhotra & Dash, 2009, pp. 224). Where, experimental design is a set procedure specifying the test unit and sampling procedures, independent variables, dependent variables and how to control the extraneous variables. Further, experimental designs may be classified into pre-experimental, true experimental, quasi experimental or statistical. Where, pre – experimental designs do not employ randomization procedures and one shot case study is a pre – experimental design in which a single group of test units is exposed to a treatment X, and then a single measurement on the dependent variable is taken (Malhotra & Dash, 2009). Thus in this study, the reaction of the respondents is measured only once, under one shot case study, pre-experimental designs (X O1). Five different created animated spokes – character television advertisements of FMCG products have been identified and shown randomly in such a way that, each respondent should encounter with any one of these advertisement before attempting to fill the questionnaire.

3.5 Data Source

The secondary data in the form of previous research work, industry reports and articles are collected from the library of Mudra Institute of Communication (MICA) and Indian Institute of Management (IIM), Ahmedabad. E – Journals packages like Emerald Management Extra, Proquest & Ebsco has widely used for collecting the information about previous research.

Primary data is collected through scientifically designed questionnaire having close-ended questions. During pilot study, it is observed that most of the time intermediaries would like to fill the questionnaire by them self instead of getting asked by the researcher, so it was kept respondent administered.

3.6 Experiment Stimulus

In this study, a television advertisement with created animated spokes – character is used as a stimulus. An advertisement has been shown to the respondent after responding the warm up questions. For the purpose of this research, a spokes-character is defined as a
recurring fictional persona with a distinct personality that is created to sell a product or a service. Among the AMOP (Appearance, Medium, Origin and Promotion) framework of spokes – character definition, the study will concerned Fictional persona which includes animated characters as well as human characters so long as they are fictional. Furthermore, the study will only be concerned with non-celebrity characters (i.e. having non – celebrity origin), as these characters are created specifically for advertising use and doing active promotion. In the case of celebrity characters, consumers may have other feelings and attitudes formed by non-advertising related observations. Those outside opinions and views of celebrity characters could interfere with this research. Since the subject were youth and as the Hindi had emerged as the most preferred language among youth (National Youth Readership Survey by NACER, 2009); the advertisement targeting to youth with Hindi language were chosen. Another criteria for choosing advertisement was product category i.e. Fast Moving Consumer Goods (FMCG) was selected because according to FICCI-KPMG Indian Media and Entertainment Industry Report (2014, p. 24) note that in 2013; FMCG sector and Service sectors are highest spenders on television advertisements where 41 per cent TV advertisement spending is from FMCG sector (TAM Adex Report, 2013). In addition to this, top 10 product categories [i.e. Biscuits (12%), Milk Beverage (12%), Soft Drink Aerated (10%), Chocolates (10%), Soft Drinks Non – Aerated (5%), Spices (5%), Tea (5%), Noodles (3%), Edible Oil (3%), Chewing Gum (3%) and others]; accounted for 69 per cent of Food and Beverages sector advertising. And also according to IBEF report on FMCG sector (2011, p. 03), rising disposable income of the young population was a major growth driver for the FMCG sector.

The advertisement were chosen on the basis of content analysis done on 158 Indian television advertisements with created spokes – character (all available on YouTube), 5 advertisements were selected which satisfying following conditions according to AMOP parameter of created spokes – characters and other conditions.

1. Appearance: Fictitious Human (Human or Caricature)
2. Medium: Television is medium selected. So, advertisement appearing in television is selected.
3. Origin: Advertising (Non – celebrity)
4. Promotion: Active (Either spokes – character speak for the product or demonstrate for the product)
5. Advertisement should be targeting to youth.
6. Advertisement should related to FMCG products
7. No presence of Common Man or Celebrity or Employee
8. Length of the advertisement taken into consideration.

According to IBEF report, FMCG category was broadly divided into three parts i.e. Household Care, Personal Care and Food & Beverages but from the content analysis of 158 advertisements of created animated spokes – character, researcher was unable to found in advertisements in Household Care category and Personal Care Category keeping in view the above mention conditions. Thus, this study will be limited to Food & Beverages of FMCG Category. Following 5 Hindi advertisements were scrutinized from 158 advertisements (Refer Table 3.1).

**Table 3.1: Details of Advertisement used as Stimuli**

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Name of the Created Spokes Character</th>
<th>Name of the Brand</th>
<th>Length of the Ad</th>
<th>Brief Description about the Advertisements</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Fido Dido 7 Up Soft Drink</td>
<td>7 Up Soft Drink</td>
<td>0.31 Seconds</td>
<td>In this advertisement Fido Dido climbed up on an ice cube and drink 7 Up.</td>
</tr>
<tr>
<td>2.</td>
<td>Amul girl Amul Butter</td>
<td>Amul Butter</td>
<td>0.11 Seconds</td>
<td>In a cricket match, Amul girl is offering butter with tag line, “Utterly Butterly Delicious, Amul”.</td>
</tr>
<tr>
<td>3.</td>
<td>Dairy milk girl Dairy milk</td>
<td>Dairy milk</td>
<td>0.30 Seconds</td>
<td>On the birthday of dairy milk girl her well-wishers organize a surprise party for her and gifted her dairy milk.</td>
</tr>
<tr>
<td>4.</td>
<td>Chacha and Chachi Marie lite Biscuits</td>
<td>Marie lite Biscuits</td>
<td>0.34 Seconds</td>
<td>Chacha and Chachi is eating Marie Lite biscuit with the tea and children are playing in front of home.</td>
</tr>
<tr>
<td>5.</td>
<td>Fanta Girl Fanta Soft Drink</td>
<td>Fanta Soft Drink</td>
<td>0.30 Seconds</td>
<td>All Characters are jumping with the background tune “Fanta karde masti start”</td>
</tr>
</tbody>
</table>
3.7 Sampling Method
When total population may not be available in certain case, at the scene of major event, it may be infeasible to attempt to construct a probability sample (Cooper & Schindler, 2007, pp 423). In this case when number of respondents are in million and no such list has been available, it is decided to go with non-probability sampling method. It is believed that the carefully controlled non-probability sample often seems to give acceptable results (Cooper & Schindler, 2007, pp 423). Quota sampling is a non probability sampling technique that is a two stage restricted judgmental sampling. The first stage consists of developing control categories or quotas of population elements. In the second stage, sample elements are selected based on convenience or judgment (Malhotra & Das, 2007, pp 323). To improve the representation, with quota sampling the controlling dimensions considered are respondent’s age, gender, annual family income and marital status. It has been decided that the number of respondent should be equal in terms of age groups [(13 to 21 years) and (22 to 35 years)] while the ratio for male and female respondents should be 60:40. For the controlling dimension education and annual family income, it is decided that each response category should have more than 100 respondents. In the second stage sample elements are selected on the basis of convenience. Thus, the population of this study was a convenience sample from Gujarat state. The study was introduced to the respondents with detail understanding of created animated spokes – character.

3.8 Sample Size
Larger Sample size results increase in power (Cohen, 1990 & 1992) so it more accurately represents the characteristics of the populations from which they are derive (Cronbach et al., 1972; Marcoulides, 1993).

3.8.1 Number of Participants: Factor analysis
A good general rule of thumb for factor analysis is 300 cases (Tabachnick & Fidell, 1996) or the more lenient 50 participants per factor (Pedhazur & Schmelkin, 1991). Comrey and Lee (1992) give the following guide samples sizes: 50 as very poor; 100 as poor, 200 as fair, 300 as good, 500 as very good and 1000 as excellent (Tabachnick & Fidell, 1996).

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13 Controlling dimensions wise details of sample is provided in data analysis chapter, Table 4.5.1: Sampling Profile.
14 In education ‘doctorate’ and in annual family income ‘income more than 7 lacs’ this criteria is not applicable as it is difficult to find the respondents for respective categories.
Caveat: Guadagnoli and Velicer (1988) have shown that solutions with several high loading marker variables (> .80) do not require as many cases.

3.8.2 Number of Participants: Cell size for statistics used to detect differences

The independent samples t-test, ANOVA (one-way or factorial), MANOVA are all statistics designed to detect differences between or among groups. Given a medium to large effect size, 30 participants per cell should lead to about 80 per cent power (the minimum suggested power for an ordinary study) (Cohen, 1988). Cohen conventions suggest an effect size of .20 is small, .50 is medium, and 0.80 is large. If, for some reason, minimizing the number of participants is critical, 7 participants per cell, given at least three cells, will yield power of approximately 50 per cent when the effect size is 0.50. Fourteen participants per cell, given at least three cells and an effect size of 0.50, will yield power of approximately 80 per cent (Kraemer & Thiemann, 1987).

Caveats: First, comparisons of fewer groups (i.e., cells) require more participants to maintain adequate power. Second, lower expected effect sizes require more participants to maintain adequate power (Aron & Aron, 1999). Third, when using MANOVA, it is important to have more cases than dependent variables (DVs) in every cell (Tabachnick & Fidell, 1996).

3.8.3 Number of participants: Statistics used to examine relationships

Although there are more complex formula, the general rule of thumb is no less than 50 participants for a correlation or regression with the number increasing with larger numbers of independent variables (IVs). Green (1991) provides a comprehensive overview of the procedures used to determine regression sample sizes. He suggests $N > 50 + 8m$ (where $m$ is the number of IVs) for testing the multiple correlation and $N > 104 + m$ for testing individual predictors (assuming a medium-sized relationship). If testing both, use the larger sample size.

Although Green’s (1991) formula is more comprehensive, there are two other rules of thumb that could be used. With five or fewer predictors (this number would include correlations), a researcher can use Harris’s (1985) formula for yielding the absolute minimum number of participants. Harris suggests that the number of participants should exceed the number of predictors by at least 50 (i.e., total number of participants equals the number of predictor variables plus 50), a formula much the same as Green’s mentioned
above. For regression equations using six or more predictors, an absolute minimum of 10 participants per predictor variable is appropriate. However, if the circumstances allow, a researcher would have better power to detect a small effect size with approximately 30 participants per variable. For instance, Cohen and Cohen (1975) demonstrate that with a single predictor that in the population correlates with the DV at .30, 124 participants are needed to maintain 80 per cent power. With five predictors and a population correlation of .30, 187 participants would be needed to achieve 80 per cent power.

Caveats: Larger samples are needed when the DV is skewed, the effect size expected is small, there is substantial measurement error, or stepwise regression is being used (Tabachnick & Fidell, 1996).

3.8.4 Formula & Calculation
Zikmund (2004, pp. 465-466) has given the formula for calculation of sample size for questions involving mean. Bartlett, Kotrlik, and Higgins (2001) had discussed about use of Cochran’s formula for sample size determination. They have also mentioned the procedure for identifying the needed variables (Z, S & E) to be included in formula. According to it the values have been identified and sample size is calculated.

\[ n = \left( \frac{z \times s}{E} \right)^2 = \left( \frac{1.96 \times 1.27}{0.25} \right)^2 \]

Where Z means value for selected alpha level of .025 in each tail, which is 1.96. Where S means estimate of standard deviation in the population, which is 1.27. [Estimate of variance deviation for 5 point scale calculated by using 5 (inclusive range of scale) divided by 3.92 (number of standard deviations that include almost all (95 per cent, table value 1.96 on each side) of the possible values in the range)]. Where E means acceptable margin of error for mean being estimated is 0.25. (Number of points on primary scale * acceptable margin of error; points on primary scale = 5; acceptable margin of error = .05 [error researcher is willing to except]).

According to Bartlett, Kotrlik, and Higgins (2001) for determining the sample size for categorical data the following formula is used. In this case the population of intermediary is also infinite. The formula and calculation is mentioned as under (Levin & Rubin, 2003, pp. 379-382). 95 per cent level of significance had been taken and the expectation is the estimation should be within 0.05.
Symbolically If \[ Z \sigma_p = 0.05 \]

And \[ Z = 1.96 \]

Than \[ 1.96 \sigma_p = 0.05 \]

\[ 1.96\sqrt{pq/n} = 0.05 \]

\[ \sqrt{pq/n} = 0.02551 \]

\[ pq/n = 0.0006507 \]

\[ n = \frac{pq}{0.0006507} \]

As there is no idea about p and q, it is better to go with conservative approach (Levin & Rubin, 2003, pp. 381). By looking p=0.5 and q=0.5 the maximum sample size can be obtained.

\[ n = \frac{0.5 \times 0.5}{0.0006507} \]

\[ n = \frac{0.25}{0.0006507} \]

\[ n = 384.20 \]

Approximately sample size is 384.

After considering the mentioned literature (sample size required for various tests and formula) it has been decided to survey 1200 youth respondents i.e. 13 to 35 years. To justify the various quota sampling dimensions the actual sample size was take is 1220 youth respondents.

The sample size would be divided into five parts and all shown different advertisements as to get the collective impact of FMCG product’s created animated spokes – character advertisements.

### 3.9 Measures

A questionnaire is used in this study to collect the primary data. In this study, the independent variables were cognitive responses i.e. Product / message related thoughts (measured by Counter arguments & Support arguments), Sources related thoughts
(measured by Source Derogation, Source Bolsters, Source Credibility and Source Likeability) and Ad execution related thought (measured by positive ad execution and negative ad execution) while dependent variables were Attitude towards ad, Attitude towards brand and Purchase Intention. The following measures were used to measure the variables.

3.9.1 Cognitive Responses

In most quantitative research practices, individuals are given sets of expresses cognitive thoughts, feelings and/or behaviors (i.e. statements or questions) and asked to classify their own thoughts or feelings about them using some type of structures, intensity – based coding scheme predetermined by the researcher (e.g., scale measurement). In contrast, most qualitative research practices normally ask selected participants to simply write down their cognitive thoughts, feelings, or behaviors about a specific experimental stimulus in an unstructured format without requiring any classification task or use of any explicit predetermined cognitive coding scheme (Wright, 1973).

But, Belch and Belch (2001) had given a model which attempted to relate cognitive responses to purchase intention were three main categories of cognitive response was identified i.e. Product / Message related thoughts, source oriented thoughts and Ad – execution thoughts. Taking this model as a base, in this research cognitive responses are measured by the three categories i.e. Product / Message related thoughts, Source oriented thoughts and Ad – execution thoughts. Product / Message thoughts included cognitions concerning either the product or the claim made in the message. Source related thoughts included thoughts related to source in the advertisement and Ad execution cognitions were those generated in response to the way the advertisement was done in terms of ad quality, creative style, colors etc. These categories can be further classified into six sub-categories: product / message related thought divided into two sub categories i.e. support argument and counter argument defined by Wright (1973), source oriented thought divided into another two category i.e. source derogation defined by Wright (1973) and source bolstering defined by Belch (1981) and thoughts about execution aspects of the ad were defined according to widely used protocol (Severn, Belch & Belch, 1990) were ad execution related thought can be either favorable or unfavorable.

Based on the previous research, immediately after viewing the ad, subjects were asked to list cognitive responses to the stimulus ads. Subjects were given time to write down the
thoughts that went through their minds while viewing the advertisement. But from the pilot study it was founded that respondents are not able to give proper cognitive response which can be coded in sub – categories which are given in previous foreign research. So, in order to convert these open ended cognitive responses to close ended, 150 cognitive responses are taken from 30 respondents by showing 5 advertisements of created animated spokes – character each in pilot study.

3.9.2 Source Credibility

The source credibility scale was aimed at capturing measure created animated spokes – character’s perceived credibility that includes trustworthiness, expertise and attractiveness (Ohanian, 1990). The attractiveness measure was created from adjectives used to describe the character’s physical characteristics as described by Callcott and Phillips (1996). It consisted of five five-point items anchored by attractive/unattractive, cute/ugly, adorable/unlovable, appealing/unappealing, and charming/dull. Ohanian (1990) and Garretson and Niedrich’s (2004) measures for trustworthiness and expertise were used for those measures. The trustworthiness measure had five five-point items anchored by undependable/dependable, dishonest/honest, unreliable/reliable, insincere/sincere, and untrustworthy/trustworthy. The expertise measure had five five – point items anchored by not an expert/expert, inexperienced/experienced, unknowledgeable/knowledgeable, unqualified/qualified, and unskilled/skilled.

3.9.3 Source Likeability

A three item, five – point semantic differential scale, very likeable / very unlikeable, very pleasant / very unpleasant, and very agreeable /very disagreeable (Tripp et al., 1994) was used to measure a created animated spokes - character's likeability.

3.9.4 Attitude towards the advertisement

Attitude towards the advertisement was measured by having the subjects respond to five point semantic differential scale assessing their overall reaction to the advertisement. These items included Good / Bad, Like / Dislike, Interesting / Boring, Creative / Uncreative & Informative / Uninformative. These scales, which include both affective and evaluative content, were selected based on a review of existing research (e.g., Gardner, 1985; MacKenzie, Lutz & Belch, 1986) and the same scale was used in Beihal, Stephens and Curlo (1992) were Cronbach’s alpha was 0.85.
3.9.5 **Attitude towards Brand**

Mitchell & Olson (1981) measured attitude towards the brand using five point, semantic differential scale with items including Good / Bad, Like Very much / Dislike Very Much, Pleasant / Unpleasant, Poor Quality / High Quality. The scale was used in the study by Biehal, Stephens and Curlo (1992) with Cronbach’s alpha of 0.93, Mitchell (1986) and Gardner (1985). Cronbach’s alpha for attitude toward the brand was 0.88, thus giving mean reliability of 0.91.

3.9.6 **Purchase Intention**

Purchase Intention was measured with five – point, semantic – differential scale consisting of three items: Likely / Unlikely, Probable / Improbable, and Possible / Impossible. This scale has been used in studies by MacKenzie, Lutz and Belch both in 1983 and 1986; and by Yoon, Kim and Kim (1998).