

## **Advertising Skepticism, Need for Cognition and Consumers' Attitudes**

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# Advertising Skepticism, Need for Cognition and Consumers' Attitudes

## ABSTRACT

**Purpose** – This paper examines the relationship of advertising skepticism and need for cognition with consumers' attitudes towards brand. There is currently limited understanding on how advertising skepticism and need for cognition relate to the consumers' attitudes.

**Methodology** – Using a 'within-brand-comparison' strategy, a mock print advertisement of a telecom brand is shown to 204 cellular services users in Pakistan. This is followed by a survey. Data are analysed using a variance-based structural equation modelling.

**Findings** – The relationship of advertising skepticism with attitude towards brand is negative and partially mediated by the sequence of brand image, advertisement believability and attitudes towards advertisement. In contrast, the relationship between need for cognition and attitude towards brand is positive and fully mediated by the sequence of brand image, advertisement believability and attitudes towards advertisement.

**Originality/value** – The paper fills some theoretical as well as empirical gaps by showing how (in a within-brand advertisement context) advertising skepticism and need for cognition relate to the consumers' attitudes towards brand.

**Keywords** – Advertising Skepticism; Need for Cognition; Advertisement Believability; Brand Image; Within-brand Comparisons.

# **Advertising Skepticism, Need for Cognition and Consumers' Attitudes**

## **INTRODUCTION**

In today's highly competitive environment, advertisers' need to evaluate their advertisements' effectiveness and the consumers' responses, have greatly increased (Li et al., 2017, Wells, 2014). No matter how convincing an advertisement might appear, it is susceptible to consumer biases, which may be triggered by their varying levels of advertising skepticism and need for cognition. Thus, how an advertisement will be received by the viewers or how they will respond to the advertised brand/product is mostly unclear to the marketers.

Much research has been conducted on advertising skepticism, particularly with regard to the consumers' attitudes towards advertisements. However, with regard to the consumers' attitudes towards brands, the understanding is rather poor (Pan et al., 2017, Yagci et al., 2009, Wyer and Hong, 2010). With regard to need for cognition and the consumer's attitude, studies look at need for cognition rather indirectly (Zhang et al., 2017, Brennan and Bahn, 2006, Chang and Yen, 2013, Putrevu et al., 2004, Batra and Stayman, 1990), and there is little research that examines how need for cognition as an independent factor relates to the consumers' attitudes.

This paper aims to fill some gaps mentioned above, and examines the relationships of need for cognition and advertising skepticism with the consumers' attitudes towards brand. We propose that the relationships of need for cognition and advertising skepticism with the attitudes towards brand are mediated by the sequence of brand image, advertisement believability, and the attitude towards advertisement. We adopt a within-brand comparison strategy using a survey. We expose respondents to a mock print advertisement of a popular telecom brand (a subsidiary of a

foreign multinational firm headquartered overseas) operating in Pakistan. This is followed by a survey. Data from 204 telecom service users in Pakistan are gathered. Pakistan is a rather ignored context with regard to studies in consumer research. Pakistan has a population of around 200 million, with around 145 million registered cellular service users (PTA, 2018). With a large consumer-base, Pakistan offers an interesting context and potentially offers some interesting insights. We use variance-based structural equation modeling. Results show some support for our hypotheses.

## **THEORY AND CONCEPTUAL DEVELOPMENT**

### **Advertising Skepticism, Brand Image, Ad Believability, and Consumers' Attitudes**

Rooted in the persuasion knowledge framework of information processing (Friestad and Wright, 1994), advertising skepticism is the tendency of disregarding or showing disbelief in the claims of an advertisement (Obermiller and Spangenberg, 1998). Advertising skepticism can be seen as an independent factor (Obermiller and Spangenberg, 1998), and varies from person to person such that some individuals may exhibit low levels of skepticism, while others high levels of skepticism (Hardesty et al., 2002). Advertising skepticism links to multiple factors. For example, it is positively linked to advertisement avoidance, irritation and privacy concerns among consumers (Baek and Morimoto, 2012). It is seen as a factor of advertising literacy (i.e., the ability of viewer to analyze or recognize the advertisement) (O'Donohoe and Tynan, 1998), such that where advertising literacy is high, advertising skepticism will also be high, and the consumer's attitudes towards the advertisement will be negative (Shen et al., 2016).

Advertising skepticism can also be triggered, for example, through deceptive advertisements (Xie, 2016). In today's highly competitive market environment, marketers may exaggerate claims of benefits, solutions and the overall value associated with their offerings to achieve an increased market share and (in some cases) even for their survival (Marks and Kamins, 1988, Amyx and Lumpkin, 2016). While individuals would generally vary in terms of their perceptions or experiences with a particular brand or product, where a viewer perceives the advertising claims as exaggerated and/or false, the existing level of skepticism and suspicion of the advertiser may be triggered, leading to negative reactions and evaluations of the advertisement and the brand/product. Consumers may also become skeptical of the advertisement or the brand/product when the firm is facing a crisis (Ho et al., 2016). In any case, a highly skeptical individual will generally have a negative orientation towards the advertisers' claims or offerings than a less skeptical individual (Joireman et al., 2018).

Another aspect involves the increasingly changing customer needs, hyper-competition and the increasing buying power of the consumers. Consumers now have greater knowledge of the dynamic marketplace and the various business offerings, they have a range of options to choose from with regard to the products/brands, and are becoming savvy in their purchase decisions. Empirical evidence suggests that advertising distrust and skepticism are largely prevalent among the consumers (DeLorme et al., 2009, Calfee and Ringold, 1994, Park et al., 2014). Therefore, to create a positive impression of their brand/product, as well as to reduce suspicion and negative attributions towards it, marketers spend a lot on their advertisements. Doubts in the advertising claims do not just negatively influence the consumers' attitudes towards the brand, but also their purchase intentions (Chen and Leu, 2011).

Obermiller et al. (2005) studied the effects of advertising skepticism on consumers' response towards advertisements, and found that: 1) advertising skepticism links negatively to the consumer's attitude towards advertising, and the level of believability in the advertising claims, 2) advertising skepticism leads to less attention to, reliance on and confidence in the advertisement, and views that advertising is suspicious, and 3) consumers with higher levels of advertising skepticism are less responsive to various informational appeals of the branded advertising. Recent research confirms the earlier findings and shows a negative association of advertising skepticism with the consumers' attitudes towards an advertisement (see Joireman et al., 2018, Lee et al., 2016).

Consumers with higher advertising skepticism are not persuaded by informational advertising of branded products compared to those with lower advertising skepticism (Park et al., 2014). Li and Miniard (2006) suggest that an advertisement that is able to appeal to the viewers (in terms of trust in or believability of the claims made in the advertisement), will likely have a positive impact on the consumers' attitudes towards the brand. In other words, where there is low advertising skepticism, the image of and attitude towards the brand will be positive. Chen and Leu (2011) show that advertising skepticism has a negative impact on the consumers' attitudes to the brand as well as the intention to purchase the branded product, leading to undesirable word of mouth as well as customer loss. Advertising skepticism has a negative association with brand awareness as well as the attitude towards the brand such as purchase intention. Research suggests that advertising skepticism is negatively associated with brand familiarity (Hardesty et al., 2002), and there is a negative association between advertising skepticism and brand purchase intention (Zarouali et al., 2017, Joireman et al., 2018, Chang and Cheng, 2015, Rogers, 1975). When the marketer exaggerates about a brand that is less familiar, the attitudes towards the advertisement

and the brand will be negative (Zhang et al., 2017). Therefore, it can be argued that advertising skepticism is negatively associated with brand image and the attitude towards the brand. Thus, based on the above, we hypothesize that:

Hypothesis 1a: *Advertising skepticism and consumers' attitude towards advertisement are negatively associated.*

Hypothesis 1b: *Advertising skepticism and consumers' attitude towards brand are negatively associated.*

Hypothesis 1c: *Advertising skepticism and brand image are negatively associated.*

Hypothesis 1d: *Advertising skepticism and advertisement believability are negatively associated.*

### **Need for Cognition, Brand Image, Ad Believability, and Consumers' Attitudes**

Need for cognition is the tendency in individuals through which they are motivated to engage in and enjoy effortful cognitive activities (Cacioppo and Petty, 1982). Need for cognition also varies across individuals, with individuals high on need for cognition more likely to enjoy cognitive activity and process complex information (Petty et al., 1984), and generate thoughts (Petty et al., 2007), compared to people with low need for cognition. There are several contingencies linked to human judgement and processing of information. For example, according to the cognitive-experiential self-theory (Epstein, 2003), people possess a dual information

processing system, involving a rational and an experiential (involving emotions) system, which interact and work in parallel. The experiential processing system is characterized as emotional, impulsive, intuitive, and implicit, while the rational is cognitive, reflective, and explicit (Petty and Briñol, 2006, Epstein, 2003). Because of this parallel processing, it is difficult to assert how an individual high in terms of rationality, but low in terms of emotions versus an individual high both in rationality and emotions etc. (Epstein, 2003, Petty et al., 2009) will respond to an advertisement or a brand.

Individuals' response with respect to the advertisements, brands and products versus their level of need for cognition can vary. Research suggests two routes for processing persuasive information (such as in the advertisements): central and peripheral (Petty and Cacioppo, 1986). The central route involves a careful evaluation of the message content in terms of its merit and strength. In the peripheral route, however, there is less weighing of the argument, and the message is evaluated more in terms of simple prompts or cues. The central route is more linked to the use of cognitive resources than the peripheral route, and so individuals high in need for cognition engage more in central processing (with deep elaboration of information, and a systematic and careful evaluation of the message), whereas individuals low in need for cognition engage more in peripheral processing (looking at factors such as affective tone, credibility of the source, and the quantity of the arguments) (Steward et al., 2003, Petty and Cacioppo, 1986).

There are few studies on the role of need for cognition vis-à-vis the consumers' attitudes; however, the existing ones provide a good overview. For example, Putrevu et al. (2004) in an experiment using printed advertisements show that individuals high in need for cognition are more likely to have a positive attitude towards the advertisement and the brand as well as an intention to purchase when the printed advertisement is complex, as compared to individuals low



in need for cognition. The same is true for knowledgeable consumers versus novices (Putrevu et al., 2004). As consumers analyze an advertisement through the brand-evaluation lens (Dehghani and Tumer, 2015), their ability to think effortlessly relies on the level of brand familiarity and brand popularity. When a consumer observes unfamiliar brand advertisements, their need for cognition demands more effort and energy to reorganize the brand according to their perceptual mapping. These perceptual map sets are formulated based on the way a consumer recognizes and evaluates a desired brand category and their evaluation becomes negative when the brand is unfamiliar or is poorly evaluated (Hastak and Olson, 1989, Zhang et al., 2017). Furthermore, consumers with a high need for cognition would be more influenced by the power and believability of the claims or the argument quality in an advertisement as compared to consumers with a lower need for cognition (Batra and Stayman, 1990). Individuals high in need for cognition prefer to make their own conclusions about the message (Martin et al., 2003), and look for believability in the claims and further information on the claims (Richard and Chebat, 2016).

An individual high in need for cognition is less likely to respond positively towards the advertisement, and the brand, and is less likely to purchase the branded product, if the brand is less familiar and the marketer is perceived to be exaggerating (Zhang et al., 2017). Similarly, an individual high in need for cognition is more likely to respond positively towards the advertisement, and the brand, and is more likely to purchase the branded product, if the consumer perceives the attributes associated with the brand as relevant (Zhang et al., 2017). Thus, need for cognition should have a positive association with the brand image, advertisement believability, and the consumers' attitudes towards the advertisement and the brand. Hence, based on the above, we hypothesize as follows:

Hypothesis 2a: *Need for cognition and consumers' attitude towards advertisement are positively associated.*

Hypothesis 2b: *Need for cognition and consumers' attitude towards brand are positively associated.*

Hypothesis 2c: *Need for cognition and brand image are positively associated.*

Hypothesis 2d: *Need for cognition and advertisement believability are positively associated.*

### **Brand Image, Advertisement Believability, and Consumers' Attitudes**

Research suggests that consumers, when judging a brand/product through advertisements, consider a range of factors. These include persuasion knowledge (Wang et al., 2017), prior reputation and situation (Ho et al., 2016), source credibility and product claims (Shu and Carlson, 2014), brand familiarity (Hardesty et al., 2002), and the product type (DeLorme et al., 2009). Therefore, when the brand/product is familiar or has a good reputation and/or when there is confidence in the claims made by the marketer, the consumers are likely to have positive attitudes towards the advertisement and the brand.

An advertising message is perceived as more believable if it falls within one's latitude of acceptance (Sherif and Hovland, 1961). In other words, advertising is more believable when it coincides with a consumer's pre-existing attitudes. Consumers pay considerable attention to the brands that they are well aware of and have positive perceptions and evaluations about. An

advertisement for such a brand with a positive perception and evaluation would be considered more credible and believable by the consumer (Keller, 2016). Furthermore, when the consumer is confident that the advertisement is providing accurate information, the consumer's willingness to respond positively to the advertisement increases (Beltramini, 1988, Chan et al., 2017), hence leading to a positive attitude towards the advertisement and the brand (Bialaszewski and Giallourakis, 1985). Advertisement believability leads to positive attitudes towards the advertisement and the brand, leading to purchase intentions (Chan et al., 2017). Furthermore, positive attitudes towards the advertisement lead to positive attitudes towards the brand (MacKenzie and Lutz, 1989, Zhang et al., 2017). Based on the above, we hypothesize that:

Hypothesis 3a: *Brand image and advertisement believability are positively associated.*

Hypothesis 3b: *Brand image and the consumers' attitudes towards advertisement are positively associated.*

Hypothesis 3c: *Brand image and the consumers' attitudes towards brand are positively associated.*

Hypothesis 3d: *Advertisement believability and the consumers' attitudes towards advertisement are positively associated.*

Hypothesis 3e: *Advertisement believability and the consumers' attitudes towards brand are positively associated.*

Hypothesis 3f: *Consumers' attitude towards advertisement and consumers' attitude towards brand are positively associated.*

## **Mediating Roles of Brand Image, Advertisement Believability, and Consumers' Attitudes towards Advertisement**

We have hypothesized the direct relationships of advertising skepticism and need for cognition with the attitudes towards brands (Zarouali et al., 2017, Joireman et al., 2018, Chang and Cheng, 2015, Zhang et al., 2017, Putrevu et al., 2004). We now hypothesize the indirect relationships of advertising skepticism and need for cognition with the attitudes towards brands. We propose a sequence of factors: brand image, advertisement believability, and attitude towards advertisements, through which the proposed mediation occurs. Previously we have hypothesized that advertising skepticism and brand image are negatively associated (Li and Miniard, 2006, Hardesty et al., 2002), whereas need for cognition and brand image are positively associated (Hastak and Olson, 1989, Zhang et al., 2017). Brand image and advertisement believability are positively associated (Keller, 2016), advertisement believability and consumers' attitudes towards advertisements are positively associated (Beltramini, 1988, Chan et al., 2017), and attitudes towards advertisement and attitudes towards brand are positively associated (MacKenzie and Lutz, 1989, Zhang et al., 2017). We now hypothesize that the indirect relationship of advertising skepticism with the attitude towards brand will be negative, and the same relationship with need for cognition will be positive.

As discussed earlier, advertising skepticism can develop naturally as a result of an individual's personality as well as being triggered by certain factors related to the brand or the advertisement (Amyx and Lumpkin, 2016, Obermiller et al., 2005, Wang et al., 2016, Ho et al., 2016). Whatever the advertising skepticism driver or determinant, the individual's image of the advertised brand will be negative. With regard to the level of believability in an advertisement, there can be several possible influences on the consumer's perception. For, example, it can be

that the advertisement is making claims that generally make no sense; and/or, the advertisement involves a new brand, but the message or the way of communicating is too boastful or exaggerated for a new brand (Goldberg and Hartwick, 1990). In any case where the consumer is exposed to a brand of which the consumer has a negative image, the consumer is less likely to believe the claims made in the advertisement. Thus, the consumer will usually have a negative attitude towards the advertisement (in terms of interest, appeal and likeability), followed by a negative attitude towards the brand (in terms of the perceived level of satisfaction and benefit from the brand as well as an intention to purchase the brand/product). Based on the above, we hypothesize that:

*Hypothesis 4: Brand image, advertisement believability, and consumers' attitude towards advertisement sequentially mediate the relationship between advertising skepticism and consumers' attitude towards the brand.*

As discussed in the earlier sections, a high need for cognition in an individual reflects their general ability in rationality, processing complex information (Petty et al., 2009) and in the systematic and careful evaluation of the advertising message (Steward et al., 2003). It is logical to assume that a particular image of a brand for an individual with a high need for cognition would be wholly or partially a result of a careful evaluation of the brand by the individual. Therefore, brand image is likely to have a positive association with the need for cognition. With regard to advertisement believability, we have hypothesized a positive association with the need for cognition such that consumers with a high need for cognition are more inclined towards the

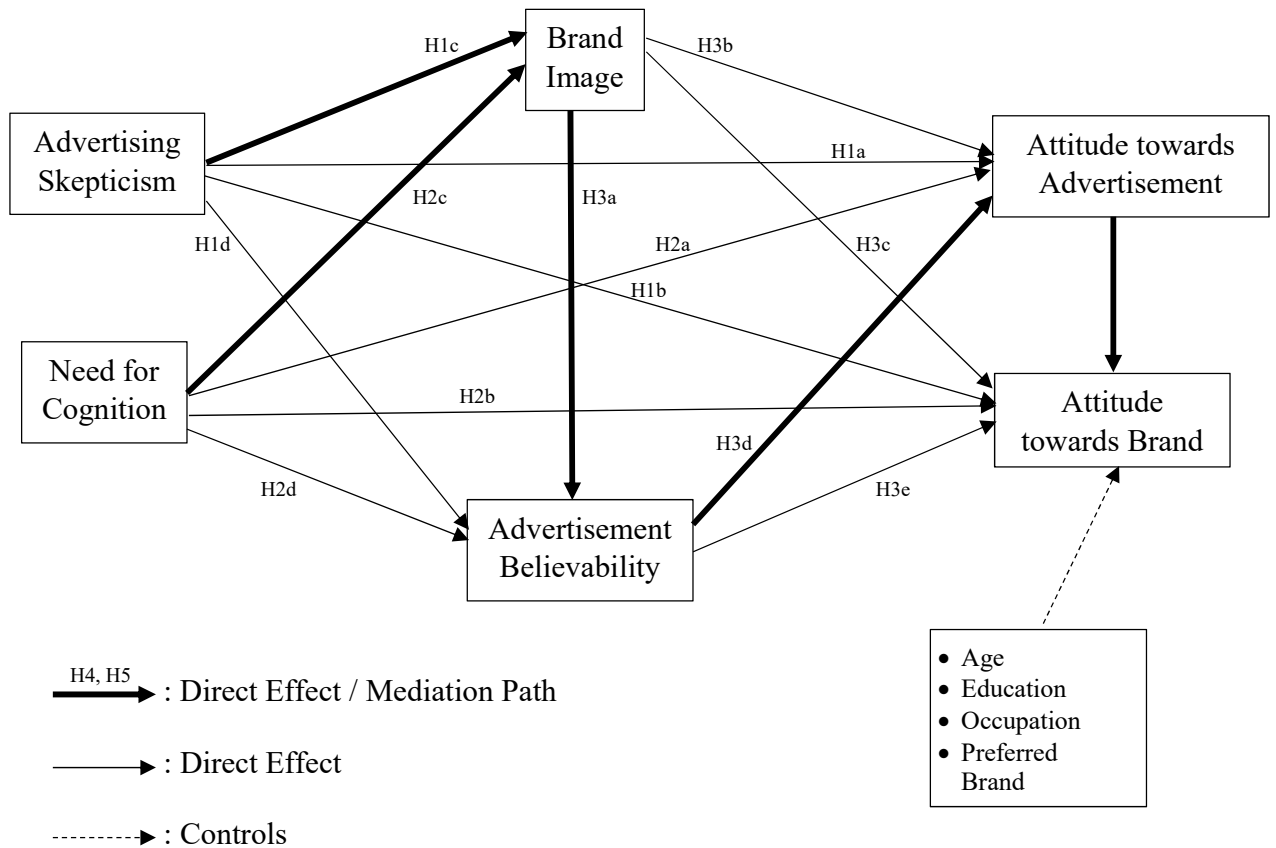
argument quality and the power and believability of the advertising claims (Batra and Stayman, 1990). The same has been hypothesized with regard to the relationships of need for cognition with the attitudes towards the advertisement and the brand, and the underlying argument's rationality and substance with regard to the advertisement and the brand/product. Thus, for the mediating sequence (brand image, advertisement believability and attitudes towards advertisement) in the relationship between need for cognition and attitude towards brand, our argument is simply as hypothesized earlier. That is, an advertisement of a brand with a positive image in the viewer's mind would be considered credible and believable by the viewer (Keller, 2016), and this would lead to a positive attitude towards the advertisement (Beltramini, 1988, Chan et al., 2017), which would then lead to a positive attitude towards the brand (MacKenzie and Lutz, 1989, Zhang et al., 2017). In short, the relationship between consumers' attitudes towards the advertisement and the brand are explained by the image the consumer has regarding the brand as well as the believability of the advertising message. Therefore, based on the above we hypothesize as follows:

*Hypothesis 5: Brand image, advertisement believability, and consumers' attitude towards advertisement sequentially mediate the relationship between need for cognition and consumers' attitude towards the brand.*

Next, we present the conceptual model of the study (see Figure 1). The model involves two independent factors (advertising skepticism and need for cognition), one dependent factor (attitude towards brand), and three mediators (brand image, advertisement believability, and

attitude towards the advertisement). A total of five control variables (categorical) are added to the model – age, gender, education, occupation and preferred telecom brand – to control for the demographic profile of the sample.

**Figure 1: Conceptual Model**



## DATA AND METHODS

### Data

The sample population for this study comprises cellular service users in Pakistan. Pakistan has a population of around 200 million, with a significant number of people using cellular services.

According to the Pakistan Telecommunication Authority, as at December 2017, there were around 145 million cellular service users in Pakistan (PTA, 2018). The telecom service sector in Pakistan, therefore, serves a huge market. In Pakistan, currently there are five major telecom brands which provide cellular services to the country. The five brands are similar with regard to market share; however, they can be differentiated in terms of the service provided. For example, one brand performs better in elevated mountainous areas, while another is better for the remote less populated areas; one is popular among the business community for its post-payment package, while another is dominant among the more frequent cellular users valuing low prices. Hence, while some differences can be seen in terms of the level of service provided, each brand competes or seeks to maintain their advantage according to their somewhat unique value proposition and the target market.

A survey questionnaire was developed, comprised a printed advertisement section, followed by a questions section. The sample population included a range of demographic types, but was stratified in terms of two characteristics: 1) cellular service users, and, 2) with a minimum secondary school level education so that they can understand and respond to the printed advertisement as well as the questions written in the English language. To meet the two requirements, we selected the sample population to consist of students, public/private sector employees, and entrepreneurs.

Data were collected from 204 respondents (in the year 2016) using a snowball sampling technique. Respondents were advised that the data collection was for the completion of an academic qualification. The printed advertisement was a single page mock advert (i.e., not a real one used by the company) of a popular cellular company (a subsidiary of a foreign multinational corporation) operating in Pakistan. A within-brand comparison strategy was employed. The



advertisement displayed the brand name with a headline of 'We are better than ever' and showed new (relevant) attributes (i.e., fast internet speed, clear voice quality, strong coverage), overall indicating an improved product. The advertisement displayed an image/logo and brand attributes backed by concrete claims such as 4G technology.

The respondents were exposed to the printed advertisement first, and later their responses were obtained to the questions. The questionnaire started with demographic information. The viewers were provided with a list of the five major cellular service providers (operating in the country) to choose from to indicate their preference. The subsequent questions sought to gauge the viewers' general level of advertising skepticism, and need for cognition, as well as their views regarding the brand image, advertisement believability, attitude towards the advertisement, and attitude towards brand, with respect to the advertisement of the product/brand shown to them.

Data were collected mainly through an online survey, which was developed using the Google Forms tool. The survey URL was sent to known telecom users comprising university students, business professionals, and academics, who then, after completing it themselves, forwarded it to their contacts. The communication tools used were email, and messaging through Facebook, and WhatsApp. Moreover, online survey data were also collected in person and added to the overall responses.

### **Measurement and Analysis**

Respondents gave opinion-based responses on a 7-point Likert scale with options ranging from strongly disagree to strongly agree. Constructs were adopted from previous studies. Need for cognition is a 3-item construct adopted from Cacioppo and Petty (1982) and Petty et al. (1984)

and measures the extent to which an individual prefers, handles or enjoys thinking and complexity. Advertising skepticism is a 7-item construct adopted from Obermiller and Spangenberg (1998). The construct measures the extent to which an individual generally perceives advertisements to be truthful, informative, and reliable. The need for cognition and advertising skepticism constructs measure the individuals' general propensities with regard to their need for cognition and advertising skepticism, and are hence generic and less contextual; therefore, it was deemed unnecessary to replicate the conditions of the studies from which these two constructs were adopted.

Brand image, advertisement believability, attitude towards advertisement, and attitude towards brand were adopted from Yagci et al. (2009). Their study looks at both within- and across-brand comparisons. Our study is a within-brand comparative study; however, we adopted the same methodology in terms of data collection (i.e., first a mock print advertisement is shown followed by a questionnaire) as Yagci et al. (2009). Brand image is a 4-item construct and measures the extent to which the respondent is aware of the advertised telecom brand and perceives it to be different and better than other brands. Advertisement believability is a 4-item construct and measures the extent to which the respondent perceives the claims of the advertised telecom brand to be true. Attitude towards advertisement is a 4-item construct and measures the extent to which the respondent perceives the advertisement to be good, interesting, appealing and likeable. Attitude towards brand is a 4-item construct and measures the extent to which the respondent perceives the advertised brand to be satisfactory, beneficial, and favorable, and has an intention to purchase the branded product. A total of five control variables (categorical) were added to the model: age (18-25=1; 26-40=2; 41-55=3), gender (male 1; female 2), education (secondary-school=1; high-school=2; undergraduate=3; postgraduate=4; doctorate=5),

occupation (self-employed=1; govt. employee=2; private employee=3; student=4; unemployed=5) and preferred telecom brand (5 brands, anonymized here).

## **RESULTS**

Steps to reduce common method variance were taken prior to the survey using the guidelines from Podsakoff et al. (2003). Moreover, the Harman's single factor test (see Harman, 1976) was employed, which shows total variance well below the 50% limit mark (i.e., at 25.96%), indicating that the data do not exhibit common method bias. Data were also checked for multicollinearity. The inner variance inflation factor (VIF) values of all the constructs are below 1.5, hence below the threshold of 3 (see Kutner et al., 2004) indicating little or no multicollinearity among the variables.

A variance-based structural equation modeling technique was used for data analysis using the SmartPLS tool (Ringle et al., 2015). To test the indirect effects' significance and to generate t-statistics and standard errors, we used the bootstrapping method (5,000 samples). Our model shows a likelihood of variance at the endogenous latent variable 'attitude towards the brand' at 24.1% ( $R^2$ : .24). Confirmatory factor analysis (CFA) was conducted to check the measurement scales' properties (see Tables 1 and 2).

The average variance extracted (AVE) scores and constructs' factor loadings are above .50 and .70 respectively (indicating good convergent validity); the composite reliability scores are also above .70, and thus the scores are above their required threshold for reliability and validity (Hair Jr et al., 2016). Cronbach's alpha scores are also above .70, except for the brand image construct where the value is .69, which is not an issue as values between .60 and .70 are also considered reliable (Hair Jr et al., 2016). The AVE square root values are higher than the

correlation coefficients between the latent variables (see Table 2), showing good discriminant validity (Fornell and Larcker, 1981). The correlation (Table 2) analysis shows some interesting findings, particularly with regard to the demographics, which we explain in the discussion section.

**Table 1: Constructs' Psychometric Properties**

Constructs		Cronbach's Alpha	Composite Reliability	AVE
1	Attitude towards Advertisement	.88	.91	.73
2	Attitude towards Brand	.85	.89	.69
3	Ad Believability	.90	.93	.77
4	Brand Image	.68	.82	.61
5	Need for Cognition	.75	.85	.66
6	Skepticism	.86	.89	.54

**Table 2: Intercorrelations**

Constructs		1	2	3	4	5	6	7	8	9	10	11
1	Attitude towards Advertisement	<b>.85</b>										
2	Attitude towards Brand	.44**	<b>.83</b>									
3	Ad Believability	.42**	.53**	<b>.87</b>								
4	Brand Image	.32**	.58**	.55**	<b>.78</b>							
5	Need for Cognition	.04	.11	.07	.16**	<b>.81</b>						
6	Skepticism	-.26**	-.27**	-.21**	-.20**	-.10	<b>.73</b>					
7	Age	.07	.04	.06	.06	.26**	.10	<b>1.00</b>				
8	Gender	.01	.04	.01	.10	-.10	-.00	-.24**	<b>1.00</b>			
9	Education	.09	.07	.11	.19**	.13	-.07	.36**	-.08	<b>1.00</b>		
10	Occupation	-.04	-.01	-.02	-.08	-.22**	-.03	-.41**	.22**	-.19**	<b>1.00</b>	
11	Preferred Telecom Brand	.06	-.04	.06	-.04	.06	.05	.06	-.07	-.08	-.01	<b>1.00</b>

AVE square root values on the diagonal (in bold); \*(p<.05); \*\* (p<.01)

With regard to the demographic profile, the respondents are mainly below 40 years of age, with 44% belonging to the 18-25 age bracket, 53% to the 26-40 age bracket, and 3% to the 41-55 age bracket. Around 63% are males and the rest are females. For education level, around 93% have a university level qualification and the others have a secondary or a higher secondary school level qualification. Around 27% are students, 9% are unemployed, and the remaining majority are employed, with around 13% self-employed. In terms of the preferred telecom brand, the data show diverse preferences. The advertised brand is not the first preference of 87% of the respondents. Furthermore, for each brand, at least 10% of responses indicate first preference. This is interesting as it provides confidence that our findings can be generalized as the results are not as biased (or specific) as they would be if the advertised brand was the first preference of all the respondents.

Looking at the direct and indirect effects, Table 3 shows that advertising skepticism is negatively associated with brand image, advertisement believability, attitude towards advertisement and attitude towards brand. Hence our hypotheses 1a, 1b, 1c, and 1d are confirmed. With regard to need for cognition, our results show some significant positive associations. They show that need for cognition is positively associated with brand image, advertisement believability, and attitudes towards advertisement; however, with regard to attitude towards brand, there is no association. Thus, our hypotheses 2a, 2c, and 2d are confirmed, but hypothesis 2b is not confirmed. Brand image is positively associated with advertisement believability, attitude towards advertisement and attitude towards brand, and therefore our hypotheses 3a, 3b, and 3c are confirmed. Advertisement believability is positively associated with attitude towards advertisement and attitude towards brand, so our hypotheses 3d, and 3e are also confirmed. Consumers' attitude towards advertisement and their attitude towards

brand are also positively associated, meaning our hypothesis 3f is also confirmed. Results show that: 1) brand image, advertisement believability, and attitude towards advertisement in a sequence positively mediate the relationship between need for cognition and attitude towards brand; and 2) brand image, advertisement believability, and attitude towards advertisement in a sequence negatively mediate the relationship between advertising skepticism and attitude towards brand. With that our hypotheses 4 and 5 are also confirmed. We elaborate on these as follows.

**Table 3: Structural Model**

<b>Structural Model</b>			
	<b>Path Coefficients</b>	<b>T-Stats.</b>	<b>P</b>
Attitude towards Ad → Attitude towards Brand	.40	6.02	.00
Ad Believability → Attitude towards Ad	.42	7.37	.00
Ad Believability → Attitude towards Brand	.17	4.14	.00
Brand Image → Attitude towards Ad	.23	5.22	.00
Brand Image → Attitude towards Brand	.09	3.53	.00
Brand Image → Ad Believability	.55	10.21	.00
Need for Cognition → Attitude towards Ad	.03	2.17	.03
Need for Cognition → Attitude towards Brand	.10	1.50	.13
Need for Cognition → Ad Believability	.08	2.30	.02
Need for Cognition → Brand Image	.14	2.40	.01
Skepticism → Attitude towards Ad	-.04	2.32	.02
Skepticism → Attitude towards Brand	-.17	2.79	.00
Skepticism → Ad Believability	-.10	2.73	.00
Skepticism → Brand Image	-.19	2.91	.00
Need for Cognition → Brand Image → Ad Believability → Attitude towards Ad → Attitude towards Brand	.01	1.97	.04
Skepticism → Brand Image → Ad Believability → Attitude towards Ad → Attitude towards Brand	-.01	2.05	.04

## **DISCUSSION, IMPLICATIONS, LIMITATIONS AND CONCLUSIONS**

First, with regard to advertising skepticism, we argued that understanding of the direct and indirect effects of skepticism vis-à-vis the consumers' perceptions about brands (Wyer and Hong, 2010) as well as their attitudes towards brands (Pan et al., 2017, Yagci et al., 2009) was lacking. In this study we took advertising skepticism as an independent factor and examined its direct and indirect effect on the consumers' attitudes towards brand. The results show that an increase in skepticism would both directly lead to negative attitudes towards the brand and indirectly through the sequence of brand image, advertisement believability, and attitudes towards advertisement. That is, advertising skepticism would negatively influence the brand image, followed by a lack of trust in the advertisement, and a negative attitude towards the advertisement. However, our correlations and structural equation modeling results also suggest that the indirect (negative) link of advertising skepticism and attitude towards brand is rather iterative and involves (in any sequence) the aspects of both the brand and the advertisement (i.e., brand image, advertisement believability, and attitudes towards advertisement).

Existing studies have mainly looked at need for cognition indirectly. For example, studies have looked at situations where need for cognition and consumer brand attitudes could be positive (Putrevu et al., 2004, Batra and Stayman, 1990), and/or studied how need for cognition would moderate the relationships of brand/advertisement aspects (Zhang et al., 2017, Brennan and Bahn, 2006, Chang and Yen, 2013). Little research has explored how need for cognition as an independent factor links with the consumers' attitudes. This study has looked at the relationship of need for cognition with consumers' attitudes and proposed an underlying sequence through which need for cognition links to the consumers' attitudes towards the brand, and this is the second key contribution of this study.

With regard to the consumers' attitudes towards brand aspects (dimensions such as purchase intention and brand/product confidence, satisfaction and perceived benefits), need for cognition has no direct link. A probable explanation is that rationality alone would not lead to decisions or intentions to purchase, or high levels of confidence in and satisfaction with a brand. The full mediation path in this study suggests an important role of the brand as well as the advertisement in the development of a positive attitude towards a brand. Therefore, based on our results the relationship of need for cognition with consumers' brand attitudes is less simplistic and involves multiple contingencies such as brand image, advertisement believability and attitudes towards advertisements.

We also make a contribution with regard to comparative advertisements. Yagci et al. (2009) studied comparative advertisements (both within- and across-brand), taking attribute relevance as a key driver for consumer elaboration with regard to the advertising message. They suggested future research should explore advertising skepticism and need for cognition as elaborating factors in a comparative advertisements context. This study responds to such research calls, and examines the independent role of need for cognition and skepticism with regard to the consumers' attitudes in a within-brand comparative advertisement (taking relevant attributes) of a telecom brand. We find support for the Yagci et al. (2009) proposition and our study is one of the few that has focused on need for cognition and skepticism in a within-brand comparative advertisement context.

The study has some implications for marketers particularly with regard to rather less understood concept of need for cognition. We show how need for cognition can be related to positive attitudes. Our implication is that for marketers targeting individuals, particularly with high need for cognition, a positive brand image is critical. High need for cognition individuals



are difficult for marketers as generally more effort is required to convince and persuade them than the individuals with low need for cognition (Putrevu et al., 2004, Steward et al., 2003). Companies therefore need to work hard on their positioning.

As with all other research, this study is not free from limitations. The first limitation of this study is the sample. Our sample involved mainly educated people with around 93% having a university level education. We chose such a sample on purpose as we wanted the respondents to be able to better comprehend the advertisement and the survey, since illiterate or less educated people are less likely to understand the questions of a written survey. While (apart from brand image) we did not find any link between the level of education and aspects such as skepticism and need for cognition, there is still a possibility that results with a different sample might differ, since our sample had such little variety in that regard. Hence future research may choose respondents with more variation in their level of education.

Second, we have studied need for cognition and skepticism as elaborating factors in a within-brand comparison; however, it could be equally insightful to also study them in an across-brand comparison study (Yagci et al., 2009). Third, the study used a cross-sectional design for analyzing consumer responsiveness towards the brand. A longitudinal study in the rapidly changing business environment may contribute significantly to our understanding of the relationships of skepticism, need for cognition and consumer behavior.

Research suggests that consumers' judgment and/or attitudes do not just involve cognition, but also emotions (Epstein, 2003, Petty et al., 2009). We have found a direct link between brand image and need for cognition (or rationality), although it is logical to assume that not every individual would share the same level of rationality. Thus, it is possible that the direct link between need for cognition and brand image, advertisement believability, and the consumers' attitudes towards advertisements is there, but is moderated by consumers' emotions,

impulses or intuition. Existing research has neglected both the processes of human information processing – rational and experiential – with regard to advertisements and brands. A more realistic insight could be developed if the study issues are examined across both the rational as well as experiential dimensions, taking both the consumers' need for cognition and emotions simultaneously to examine their behaviors towards the advertisement and the brand.

To conclude, the relationship between advertising skepticism and consumers' attitudes towards brand is less complex as compared to the relationship between need for cognition and consumers' attitudes towards brand, which involves contingencies and is less likely to be directly related.

## REFERENCES

- Amyx, D. A. & Lumpkin, J. R. 2016. Interaction effect of Ad puffery and Ad skepticism on consumer persuasion. *Journal of Promotion Management*, 22, 403-424.
- Baek, T. H. & Morimoto, M. 2012. Stay away from me. *Journal of Advertising*, 41, 59-76.
- Batra, R. & Stayman, D. M. 1990. The role of mood in advertising effectiveness. *Journal of Consumer research*, 17, 203-214.
- Beltramini, R. F. 1988. Perceived believability of warning label information presented in cigarette advertising. *Journal of Advertising*, 17, 26-32.
- Bialaszewski, D. & Giallourakis, M. 1985. Perceived communication skills and resultant trust perceptions within the channel of distribution. *Journal of the Academy of Marketing Science*, 13, 206-217.
- Brennan, I. & Bahn, K. D. 2006. Literal versus extended symbolic messages and advertising effectiveness: The moderating role of need for cognition. *Psychology & Marketing*, 23, 273-295.
- Cacioppo, J. T. & Petty, R. E. 1982. The need for cognition. *Journal of Personality and Social Psychology*, 42, 116.
- Calfee, J. E. & Ringold, D. J. 1994. The 70% majority: Enduring consumer beliefs about advertising. *Journal of Public Policy & Marketing*, 228-238.
- Chan, F. Y., Chan, H. F. & Tang, F. 2017. The effect of perceived advertising effort on brand perception: implication for retailers in Hong Kong. *The International Review of Retail, Distribution and Consumer Research*, 27, 78-93.
- Chang, C.-T. & Cheng, Z.-H. 2015. Tugging on heartstrings: shopping orientation, mindset, and consumer responses to cause-related marketing. *Journal of Business Ethics*, 127, 337-350.
- Chang, C.-T. & Yen, C.-T. 2013. Missing ingredients in metaphor advertising: The right formula of metaphor type, product type, and need for cognition. *Journal of Advertising*, 42, 80-94.
- Chen, F.-P. & Leu, J.-D. 2011. Product involvement in the link between skepticism toward advertising and its effects. *Social Behavior and Personality: An International Journal*, 39, 153-159.
- Dehghani, M. & Tumer, M. 2015. A research on effectiveness of Facebook advertising on enhancing purchase intention of consumers. *Computers in Human Behavior*, 49, 597-600.
- Delorme, D. E., Huh, J. & Reid, L. N. 2009. Direct-to-consumer advertising skepticism and the use and perceived usefulness of prescription drug information sources. *Health Marketing Quarterly*, 26, 293-314.
- Epstein, S. 2003. Cognitive-Experiential Self-Theory of Personality. In: MILLON, T. & LERNER, M. J. (eds.) *Handbook of Psychology: Personality and Social Psychology*. Hoboken, New Jersey, US: John Wiley & Sons.
- Fornell, C. & Larcker, D. F. 1981. Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 39-50.
- Friestad, M. & Wright, P. 1994. The persuasion knowledge model: How people cope with persuasion attempts. *Journal of Consumer Research*, 21, 1-31.
- Goldberg, M. E. & Hartwick, J. 1990. The effects of advertiser reputation and extremity of advertising claim on advertising effectiveness. *Journal of Consumer Research*, 17, 172-179.

- Hair Jr, J. F., Hult, G. T. M., Ringle, C. & Sarstedt, M. 2016. *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*, Sage Publications.
- Hardesty, D. M., Carlson, J. P. & Bearden, W. 2002. Brand familiarity and invoice price effects on consumer evaluations: The moderating role of skepticism toward advertising. *Journal of Advertising*, 31, 1-15.
- Harman, H. H. 1976. *Modern Factor Analysis*, University of Chicago Press.
- Hastak, M. & Olson, J. C. 1989. Assessing the role of brand-related cognitive responses as mediators of communication effects on cognitive structure. *Journal of Consumer Research*, 15, 444-456.
- Ho, B., Shin, W. & Pang, A. 2016. Corporate crisis advertising: A framework examining the use and effects of corporate advertising before and after crises. *Journal of Marketing Communications*, 1-15.
- Joireman, J., Liu, R. L. & Kareklas, I. 2018. Images paired with concrete claims improve skeptical consumers' responses to advertising promoting a firm's good deeds. *Journal of Marketing Communications*, 24, 83-102.
- Keller, K. L. 2016. Reflections on customer-based brand equity: Perspectives, progress, and priorities. *AMS Review*, 6, 1-16.
- Kutner, M. H., Nachtsheim, C. & Neter, J. 2004. *Applied Linear Regression Models*, McGraw-Hill/Irwin.
- Lee, J., Kim, S. & Ham, C.-D. 2016. A double-edged sword? Predicting consumers' attitudes toward and sharing intention of native advertising on social media. *American Behavioral Scientist*, 60, 1425-1441.
- Li, F. & Miniard, P. W. 2006. On the potential for advertising to facilitate trust in the advertised brand. *Journal of Advertising*, 35, 101-112.
- Li, Q., Huang, Z. & Christianson, K. 2017. Ambiguity tolerance and advertising effectiveness. *Annals of Tourism Research*, 63, 216-222.
- Mackenzie, S. B. & Lutz, R. J. 1989. An empirical examination of the structural antecedents of attitude toward the ad in an advertising pretesting context. *The Journal of Marketing*, 48-65.
- Marks, L. J. & Kamins, M. A. 1988. The use of product sampling and advertising: Effects of sequence of exposure and degree of advertising claim exaggeration on consumers' belief strength, belief confidence, and attitudes. *Journal of Marketing Research*, 266-281.
- Martin, B. A., Lang, B., Wong, S. & Martin, B. A. 2003. Conclusion explicitness in advertising: The moderating role of need for cognition (NFC) and argument quality (AQ) on persuasion. *Journal of Advertising*, 32, 57-66.
- O'donohoe, S. & Tynan, C. 1998. Beyond sophistication: Dimensions of advertising literacy. *International Journal of Advertising*, 17, 467-482.
- Obermiller, C., Spangenberg, E. & Maclachlan, D. L. 2005. Ad skepticism: The consequences of disbelief. *Journal of Advertising*, 34, 7-17.
- Obermiller, C. & Spangenberg, E. R. 1998. Development of a Scale to Measure Consumer Skepticism Toward Advertising. *Journal of Consumer Psychology*, 7, 159-186.
- Pan, P.-L., Meng, J. & Lee, P.-L. 2017. The Mediating Effects of Presumed Influences on Taiwanese Consumers' Skepticism toward Celebrity Endorsed Advertising. *Journal of International Consumer Marketing*, 29, 48-58.

- Park, J. S., Ju, I. & Kim, K. E. 2014. Direct-to-consumer antidepressant advertising and consumers' optimistic bias about the future risk of depression: the moderating role of advertising skepticism. *Health Communication*, 29, 586-597.
- Petty, R. E. & Briñol, P. 2006. Understanding social judgment: Multiple systems and processes. *Psychological Inquiry*, 17, 217-223.
- Petty, R. E., Briñol, P., Loersch, C. & Mccaslin, M. J. 2009. The Need for Cognition. In: LEARY, M. R. & HOYLE, R. H. (eds.) *Handbook of Individual Differences in Social Behavior*. New York, NY.: The Guilford Press.
- Petty, R. E., Briñol, P., Tormala, Z. L. & Wegener, D. T. 2007. The role of meta-cognition in social judgment. In: HIGGINS, E. T., KRUGLANSKI, A. W. & PRINCIPLES, S. P. H. O. B. (eds.) *Social psychology: Handbook of basic principles*. New York: US: Guilford Press.
- Petty, R. E. & Cacioppo, J. T. 1986. The Elaboration Likelihood Model of Persuasion. In: BERKOWITZ, L. (ed.) *Advances in Experimental Social Psychology*. San Diego, CA: Academic Press.
- Petty, R. E., Cacioppo, J. T. & Kao, C. F. 1984. The efficient assessment of need for cognition. *Journal of Personality Assessment*, 48, 306-307.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y. & Podsakoff, N. P. 2003. Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88, 879.
- Pta. 2018. *Telecom Indicators* [Online]. Available: <http://www.pta.gov.pk/en/telecom-indicators>.
- Putrevu, S., Tan, J. & Lord, K. R. 2004. Consumer responses to complex advertisements: The moderating role of need for cognition, knowledge, and gender. *Journal of Current Issues & Research in Advertising*, 26, 9-24.
- Richard, M.-O. & Chebat, J.-C. 2016. Modeling online consumer behavior: Preeminence of emotions and moderating influences of need for cognition and optimal stimulation level. *Journal of Business Research*, 69, 541-553.
- Ringle, C. M., Wende, S. & Becker, J.-M. 2015. SmartPLS 3. Boenningstedt: SmartPLS GmbH.
- Rogers, R. W. 1975. A protection motivation theory of fear appeals and attitude change. *The Journal of Psychology*, 91, 93-114.
- Shen, G. C.-C., Chiou, J.-S., Hsiao, C.-H., Wang, C.-H. & Li, H.-N. 2016. Effective marketing communication via social networking site: The moderating role of the social tie. *Journal of Business Research*, 69, 2265-2270.
- Sherif, M. & Hovland, C. I. 1961. *Social Judgment: Assimilation and Contrast Effects in Communication and Attitude Change*, Oxford, England, Yale University Press.
- Shu, S. B. & Carlson, K. A. 2014. When three charms but four alarms: identifying the optimal number of claims in persuasion settings. *Journal of Marketing*, 78, 127-139.
- Steward, W. T., Schneider, T. R., Pizarro, J. & Salovey, P. 2003. Need for Cognition Moderates Responses to Framed Smoking-Cessation Messages. *Journal of Applied Social Psychology*, 33, 2439-2464.
- Wang, H., Batra, R. & Chen, Z. 2016. The moderating role of dialecticism in consumer responses to product information. *Journal of Consumer Psychology*, 26, 381-394.
- Wang, W., Krishna, A. & McFerran, B. 2017. Turning Off the Lights: Consumers' Environmental Efforts Depend on Visible Efforts of Firms. *Journal of Marketing Research*, 54, 478-494.

- Wells, W. D. 2014. *Measuring Advertising Effectiveness*, Psychology Press.
- Wyer, R. S. & Hong, J. 2010. Chinese Consumer Behavior: The Effects of Content, Process and Language. In: BOND, M. H. (ed.) *Oxford Handbook of Chinese Psychology*. 2nd ed. New York: Oxford University Press.
- Xie, G.-X. 2016. Deceptive advertising and third-person perception: The interplay of generalized and specific suspicion. *Journal of Marketing Communications*, 22, 494-512.
- Yagci, M. I., Biswas, A. & Dutta, S. 2009. Effects of comparative advertising format on consumer responses: The moderating effects of brand image and attribute relevance. *Journal of Business Research*, 62, 768-774.
- Zarouali, B., Ponnet, K., Walrave, M. & Poels, K. 2017. "Do you like cookies?" Adolescents' skeptical processing of retargeted Facebook-ads and the moderating role of privacy concern and a textual debriefing. *Computers in Human Behavior*, 69, 157-165.
- Zhang, H., Gursoy, D. & Xu, H. 2017. The effects of associative slogans on tourists' attitudes and travel intention: The moderating effects of need for cognition and familiarity. *Journal of Travel Research*, 56, 206-220.