Reliability as a moderator in the relationship between the antecedents and consequences of general attitude toward advertising

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Abstract

Purpose – This paper aims to investigate the relationship between general attitude toward advertising and consumers’ purchase intention. The relationship between cognitive attitude, intrusiveness attitude, evaluative judgments, affective response and general attitude toward ad was examined. Furthermore, reliability as a moderator in the relationship between cognitive attitude, intrusiveness attitude, evaluative judgments, and affective response and the general attitude toward ad were studied.

Design/methodology/approach – Data from women consumers who subscribe to fashion magazines in India were collected and analyzed using a structured survey instrument. Women were selected because the products were related to women, including facial and body-care products, women sportswear, shampoos, lipstick, handbags, etc. Unit of analysis in this research is “observations,” and in all, 400 data points were analyzed, and to test hypothesized relationships, hierarchical regression and logistic regression were employed.

Findings – A conceptual model is developed and tested where (1) cognitive attitude toward ad, intrusiveness, evaluative judgments and affective responses are related to general attitude toward ad, and (2) general attitude toward ad is related to purchase intention. The hierarchical regression results show that (1) reliability moderates the relationship between cognitive attitude, intrusiveness attitude, evaluative judgments, and affective response and the general attitude toward ad. The logistic regression results support the positive relationship between general attitude toward ad and purchase intention.

Research limitations/implications – Since the present research is based on self-report measures, the limitations of social desirability bias and common method bias are inherent. Second, this research focuses only on women consumers and products purchased by women. The research has implications for literature on advertising, especially women-related products.
Practical implications – This study contributes to practicing managers who are interested in promoting the women-related products. This study highlights the importance of general attitude toward ad as a precursor for consumers' purchase intention. The study provides justification for enormous amounts of money invested in fashion advertising because of their effects on consumer behavior.

Originality/value – This study provides new insights about the effects reliability on general attitude toward ad and consumers' purchase intention. The conceptual model developed in this study adds novelty by considering reliability as a moderator, in addition to the direct relationships which have been studied by earlier researchers.

Keywords General attitude, Cognitive attitude, Affective response, Purchase intention

Paper type Research paper

1. Introduction

For over three decades, researchers concur that the effectiveness of advertising largely depends on the general attitude of consumers toward ad (Aad) (Cornelis and Peter, 2017; Gaber et al., 2019; Kaushal and Kumar, 2016; Ling et al., 2010; Lutz, 1985; Thorson, 1981; Mitchell and Olson, 1981; Shimp, 1981). Ever since the seminal publication of Lutz (1985), who demonstrated Aad is largely influenced by attitude-toward-advertising-in-general (also called, general attitude), researchers in advertising have focused on the relationship between Aad, brand attitudes and advertising effectiveness (Christian et al., 2014; Wang et al., 2002). Though the concept has been in the literature for a fairly long time, the relevance of the effectiveness of Aad cannot be underestimated. The concept has been applied even now but with a different focus. With the increase in technology and social media, marketers are shifting their attention to social media websites such as Instagram, Facebook, Twitter, as consumer behavior has undergone paradigmatic change during the last decade (Djafarova and Rushworth, 2017). For example, Luran et al. (2015) reported the use of Facebook in influencing the Aad by consumers.

The research on Aad has been scattered. For example, earlier scholars contend that Aad influences brand attitudes (MacKenzie et al., 1986). Some researchers focused on cross-cultural differences (Andrews et al., 1991; Dianoux et al., 2012; Haley and Baldinger, 1991; Petrovici and Marinov, 2007) and found that influence on the effectiveness of advertising has been different in different countries according to one study by Mehta (2000). Two decades back Durvasula et al. (1999) pointed out that consumers in different countries understand and “analyze advertisements differently” (p. 57). Prior researchers have used dual mediation hypotheses to test the effectiveness of Aad and its consequences (Brown and Stayman, 1992). Earlier researchers found that Aad also depends on the psychographics of consumer segments (some are Ad Loves and some consumers are Ad Avoiders) (Vij, 2012). Despite volumes of research in the area of Aad, to the best of our knowledge, the inter-relationships among the antecedents of the Aad, with potential moderators, have been understudied. The present study is undertaken to bridge the gap and explain the antecedents of Aad: cognitive attitude, intrusiveness attitude, evaluative judgments and affective response, and their influence on consumers’ purchase decisions. We also identify potential moderators that may have a profound influence on the Aad.

2. Literature review

The purpose of this paper is to identify the antecedents of general attitudes of women consumers toward advertising. Roughly three decades back, MacKenzie and Lutz (1989) pointed out that ad credibility, ad perceptions, attitude toward advertiser and mood as antecedents of Aad. Further, the early researchers have recognized the importance of cognitive and affective reactions of consumers that influence the consumer purchase decisions (Droge, 1989; Homer, 1990; MacKenzie et al., 1986; Sheeraz et al., 2016). Researchers also found that Aad is also positively related to brand attitudes (Anridho and Liao, 2013;
Homer and Yoon, 1992). Literature review documented that affective feelings play a vital role in understanding, interpreting and reacting to advertisements (Holbrook and Batra, 1987). Thus, both cognitive as well as affective components of the Aad need to be considered before making purchase decisions.

Some researchers document that personality of consumers plays a significant role in influencing Aad (Souiden et al., 2017). Considering the latest trend of social media, Gaber et al. (2019) report that consumers’ Aad depends on the perceived advertising value and personalization. Since consumers are increasingly becoming conscious about the protection of the environment, their Aad about green purchasing has been recognized (Nguyen et al., 2018). Furthermore, the emphasis on the research on Aad is tilting toward the effect of social networks (such as Facebook, Twitter), green purchasing, personality characteristics of consumers (De Veirman and Hudders, 2020; Knoll, 2016; Voorveld et al., 2018). Since Aad is also influenced by the effectiveness of disclaimers, it is essential to consider the material being displayed in ads (Cornelis and Peter, 2017). Researchers on Aad also documented that SMS advertisements are a low-cost strategy to influence customers (Rajesh et al., 2019).

In this research, we focus on women advertisements as the role of women in ads has been widely recognized by organizations (Ciochetto, 2007; Das, 2011; Fowler and Carlson, 2015; Kumar, 2017). This study is carried out in the Indian context where women have been significantly portrayed in ad. While some studies in India focused on the gender differences (Bakshi, 2012; Kumaravel, 2017; Vijayalakshmi et al., 2017), some of the latest research on advertising have portrayed empowered women called “femvertising” in consumer durables, luxury assets, and fashion products (Grau and Zotos, 2016; Moeran, 2010; Tsai et al., 2019). The process of viewing advertisements that promote unrealistic expectations can encourage women to focus more on their physical appearance and put themselves in the shoes of a critical observer looking from the outside (Fredrickson and Roberts, 1997). As indicated by studies, this form of media exposure results in women feeling that the body and its appearance become more relevant points of reference when it comes to describing the self (Kumar, 2017). Thus, the relationship between Aad of women and purchase intention of the products related to women have been emphasized in literature, despite the criticism leveled again the negative reactions of portrayal of women in advertisements (Han, 2003; Harper and Tiggemann, 2008; Kilbourne et al., 1985; Kumari and Shivani, 2015; Lakoff and Scherr, 1984; Thompson et al., 1999). As some researchers pointed out that there is a need to study the women in fashion magazines in different cultures (Ford et al., 1998; Patterson et al., 2008), we undertake the study in Indian context.

This research makes five significant contributions to the literature on advertising. First, cognitive attitude toward an ad plays a significant positive role, and intrusiveness plays a significant negative role in influencing the Aad. Second, the evaluative judgments made by the women consumers do not influence the general attitude, whereas affective response contributes to the formation of the Aad. The third key contribution of this study is the moderating effect of reliability in changing the strength of positive association between cognitive attitude toward ad and toward Aad. Fourth, reliability reduces the negative association between intrusiveness and Aad. Fifth, reliability is a moderator in influencing the relationship between affective response and Aad. Overall, the conceptual model developed and analyzed in this study focusing on moderating the role of reliability, especially in women consumers in the fashion industry, makes a novel contribution to the growing body of research on advertising.

3. Theoretical background and hypotheses development
The present study uses two theoretical frameworks viz., theory of reasoned action (TRA) and attribution theory (Weiner, 1974). According to the TRA, attitudes influence the behavior of individuals through their intentions (Fishbein and Ajzen, 1975). Intentions refer to the
motivation of an individual to exert effort to engage in a behavior (Eagly and Chaiken, 1993; Bagozzi and Warshaw, 1992). Recognizing the importance of cognitive and affective responses to advertising, researchers focused on analyzing the effect of the general attitude of consumers toward ads (Christian et al., 2014; Dianoux et al., 2012; MacKenzie et al., 1986; Homer and Yoon, 1992). While the interrelationships between the attitudes are studied about their impact on the purchase intention of consumers, what is lacking is the causal relationship between cognitive and affective responses to general attitude toward ad.

Another theory that applies to the present study is the attribution theory (Weiner, 1974; Kelly, 1972). The basic tenet of attribution theory is that attribute causes the behavior or attribution is a source of behavior. Attribution is a three-step process: (1) an individual has to perceive or observe the behavior, (2) the individual believes that the behavior was deliberate and (3) the individual determines whether the other people forced him to behave or behavior was caused by the situation. Attribution theory helps explain and predict the advertising messages (Kelley, 1972). The behavior elicited by consumers after following advertising messages may be to some extent caused by external factors (characteristics of the product) or maybe by internal causes (affordable price and convenience). The marketing researchers argue that attributions of the advertising messages are attributable to external factors and hence the consumers may accept the messages (Scott, 1982). Thus, attribution theory is important in attitude formation and in explaining the consumers Aad, i.e. how consumers attribute their behavior to the source of advertisement.

3.1 Hypotheses development

3.1.1 Cognitive attitude and Aad. Attitude toward a particular brand is largely influenced by the general attitude of consumers toward ad. While cognitive and affective components are unwittingly factored into the general attitude toward ad, studies examining the cause-and-effect relationships between various individual components and general attitude toward ad are not examined thoroughly. Cognitive attitude toward ad is concerned with the consumer perception of several attributes in the advertisement: informational value, function, brand, industry and social values such as ethics (Andrews et al., 1991). Extant research reveals that there is a positive association between cognitive attitude toward ad and general attitude of consumers toward Ad (Brown and Stayman, 1992; Kaushal and Kumar, 2016; Homer, 2006; Spears and Singh, 2004; Sheeraz et al., 2016). Before engaging in purchasing decision, consumers are expected to know about a product or brand and advertisement is the media to reach consumers. One understanding rationale behind all advertisements is that consumers exhibit tendency toward ad and the contents. The importance of cognitions (thoughts, beliefs and judgments) about a product or brand has been widely studied by earlier researchers (Homer, 2006; Srivastava, 2016). Based on the available existing research and empirical support, we offer the following hypothesis:

H1. Cognitive attitude toward ad is positively related to Aad.

3.1.2 Intrusiveness and Aad. Intrusiveness is related to the ads that appear in the middle of programs (e.g. television viewing), consumers feel these ads as intrusive and disturbing (when some interesting scene is about to appear); or when consumers see billboards as an obstruction to the scenic beauty while driving, consumers get frustrated with ads (Krugman, 1983; Li et al., 2002). Often consumers lament, “ad came at the wrong time”. Such intrusiveness has deleterious effects on brands. Ha (1996) defines intrusiveness as “the degree to which advertisements in a media vehicle interrupt the flow of an editorial unit” (p. 77). Intrusiveness is an important factor influencing purchase decisions (Li et al., 2002; Ha, 1996). Intrusiveness has the potential to create negative emotional reactions to ads such as cognitive ad avoidance, behavioral ad avoidance, and ad irritation (Li et al., 2002) and these subsequently have a negative effect on brand perception and attitudes (Abernethy, 1991; Krugman and Johnson,
1991). Context-free definition of intrusiveness advanced by Li et al. (2002) is “the psychological reaction to ads that interferes with a consumer’s ongoing cognitive processes” (p. 39). Examples include pop-up messages when surfing the Internet and viewing important content, commercials in the middle of something interesting in television, which obstruct the cognitive processing of consumers and these will be considered disturbing. Anecdotal evidences and available empirical support suggest the following hypothesis:

**H2.** Intrusiveness attitude toward ad is negatively related to Aad.

3.1.3 Evaluative judgments and Aad. Ad execution cues evoke evaluative judgments, and these may include story elements, vignettes, humor and role portrayals (Batra and Ray, 1986). These judgments influence general attitude of consumers toward ad. Consumers try to analyze ad and form opinions about ad, which, in turn affect their general attitude toward ad. According to Fishbein and Ajzen (1975), beliefs and attitudes play an important role in influencing the behavior and intentions of individuals. The success of any advertising depends largely on the general attitude of consumers toward ad. Lutz (1985) defined attitude toward ad as “a learned predisposition to respond in the consistently favorable or unfavorable manner to advertising in general” (p. 53). While the earlier researchers (e.g., Bauer and Greyser, 1968; Lutz, 1985) focused only on favorable or unfavorable responses to the advertisements and contemporary researchers included other variables in the measurement of general attitude which include sexual content, use of women in ad, positive and negative outcomes of ad, ethical values, etc. (Alwitt and Prabhaker, 1994; Mittal, 1990). Evaluative judgments play a vital role in influencing the Aad and based on the above we offer the following hypothesis:

**H3.** Evaluative judgments about ad are positively related to Aad.

3.1.4 Affective response toward ad and Aad. Affective responses represent moods and feelings evoked by consumers when they see ad (Batra and Ray, 1986; Chan et al., 2013). Earlier researchers on advertising focused on affective responses in relationship to general attitude toward ad. As Lutz pointed out, consumers’ affective state at the time of their exposure to advertising stimuli determine the general attitude toward ad, in addition to the cognitive reactions (Lutz, 1985, p. 54). Affective responses comprise of emotions, moods and feelings of consumers (Derbaix, 1995; Gardner, 1985). The research related to the effect of affective response on the general attitude is scant, though it has intuitive appeal, we offer the following exploratory hypothesis:

**H4.** Affective response toward ad is positively related to Aad.

3.2 Relationship between general attitude toward ad and purchase intention

The purpose of advertising is to elicit the purchase intention of consumers. Purchase intention is “an individual’s conscious plan to make an effort to purchase a brand” (Spears and Singh, 2004, p. 53). According to the theory of reasoned action, attitudes influence the behavior of individuals through their intention (Fishbein and Ajzen, 1975). Intention refers to the motivation of an individual to exert effort to engage in a behavior (Eagly and Chaiken, 1993). About advertising, purchase intention is influenced by the attitudes of consumers. Advertising effectiveness is seen by researchers in terms of purchase intention (Aktan et al., 2016; Dianoux et al., 2012; Homer, 2006). The very purpose of advertising is to elicit positive responses from customers. A meta-analysis by Brown and Stayman (1992) has covered several interesting studies demonstrating a positive relationship between general attitude toward ad by consumers and their purchase intention. The direct effect of the general attitude toward ad on purchase intention has been demonstrated by several researchers (Cox and Locander, 1987; Ling et al., 2010; Phelps and Hoy, 1996). Though some scholars have examined the mediating role of attitude toward brand between general attitude toward ad
and purchase intention (Anridho and Liao, 2013; Machleit and Wilson, 1988), a direct relationship is also supported. Based on the above, we hypothesize:

\[ H5. \text{ Aad is positively related to purchase intention.} \]

### 3.3 Reliability as a moderator

Reliability is concerned with the attitude of a person regarding a specific advertisement emphasizing the likelihood of its holding and credibility. The extent to which consumers feel the ad is dependable, however, depends on the trustworthiness of the celebrity endorsing the ad. Available empirical evidence suggests that organizations employ credible celebrities to ensure reliability (Saldanha et al., 2018; Zakari et al., 2019).

Roughly three decades back meta-analysis of antecedents of the general attitude toward ad conducted by Brown and Stayman (1992) suggests that several variables act as moderators in the direct relationships between antecedents of general attitude toward ad. While researchers focused on the impact of general attitude toward ad on purchase intention, little empirical research exists concerning the moderating effect of the reliability of ads as a moderator in the relationships. If consumers feel that the ads are reliable, it is quite likely that they change their attitude toward ad in general. The cognitive beliefs about ad are likely to be influenced by the reliability of ads. It is interesting to note that the negative relationship between intrusiveness and general attitude toward ad may be influenced by the reliability of ad. The reliability is expected to reduce the negative impact of intrusiveness. We identified “reliability” as a potential moderator in such relationships especially in magazine advertising (Donthu et al., 1993). Intrusiveness decreases the advertising efficiency as consumers do not prefer to have commercial breaks when something interesting is going on. This leads to undesirable behavior in terms of ad avoidance and reluctance to consider the products being advertised. However, following information processing theory, if consumers believe that ads are reliable, the strength of the negative impact will likely be reduced (Dobre, 2005).

Batra and Ray (1986), in their seminal paper, have identified three types of affective responses to ad viz., warmth, amusement and irritation. Available empirical evidence suggests that these responses significantly affect consumers’ brand attitudes, general attitudes toward ad and thereby influence the effectiveness of advertising (Christian et al., 2014; Wang et al., 2002). Most importantly, the evaluative judgments based on the moods of the consumers, rather than the objects of the products, are important in ad effectiveness. If consumers perceive that ads are reliable, it is quite likely that the general attitude toward ad will be altered significantly. Based on the above, we hypothesize:

\[ H1a. \text{ Reliability moderates the relationship between cognitive attitude and Aad such that at higher levels of reliability cognitive attitude is more positively related to Aad than at lower levels of reliability.} \]

\[ H2a. \text{ Reliability moderates the relationship between intrusiveness and Aad such that at higher levels of reliability intrusiveness is less negatively related to Aad than at lower levels of reliability.} \]

\[ H3a. \text{ Reliability moderates the relationship between evaluative judgments and Aad such that at higher levels of reliability evaluative judgments are more positively related to Aad than at lower levels of reliability.} \]

\[ H4a. \text{ Reliability moderates the relationship between affective response and Aad such that at higher levels of reliability affective response is more positively related to Aad than at lower levels of reliability.} \]

The conceptual mode is presented in Figure 1.
4. Method
4.1 Sample
The sample for this study consisted of college-educated women studying in one of the central universities located in the southern part of India. We ask the qualifying question as to whether the respondents show interest in fashion and lifestyle products. We made sure that these women are the readers or subscribers of printed fashion magazines. Ten categories of products that are advertised in the magazine were selected for this study. These products are selected based on the ten most commonly found products advertised in the most circulated fashion magazines. These include (1) anti-aging cream, (2) denims, (3) dress, (4) eyeshadow, (5) handbag, (6) lipstick, (7) shoes, (8) saree, (9) shampoo, and (10) sportswear. The advertisement about these products consists of front cover, back cover and content (Camillini and Pierini, 2017). A survey instrument is developed using the established measures about the variables and the respondents was asked to evaluate the advertisements in fashion magazines related to women. In all we have received 400 responses that we used in the analysis.

4.2 Measures
4.2.1 General attitude toward the ad. This is measured using the six-item scale on a seven-point Likert-type scale (score of “1” representing “strongly disagree” and “a score” of “7” representing “strongly agree”), of the instrument by Pelsmacker et al. (2002). The sample item read as: “While looking at the advertisement I got a positive impression”. The reliability coefficient Cronbach alpha for this measure was 0.909.

4.2.2 Cognitive attitude toward the ad. This is measured using seven items on a seven-point Likert scale from the instrument by Homer (1995) and Stafford (1998). The sample items read as: advertisement is believable, interesting and informative. The reliability coefficient for cognitive attitude toward ad was 0.89.

4.2.3 Intrusiveness. This is measured using a seven-item scale of Li et al. (2002). The sample items read as: “When the ad was shown I thought it was distracting, disturbing, intrusive, interfering”. The reliability coefficient for intrusiveness was 0.88.

4.2.4 Evaluative judgments. This is measured using seven-item containing unipolar items from Li et al. (2002). The sample items read as: “The advertisement was believable”; “The advertisement was informative”. The reliability coefficient for evaluative judgments was 0.91.
4.2.5 Affective response to the ad. This is measured using nine semantic differential phrases from the instrument of Bhat et al. (1998). The sample items read as: “I am not at all stimulated/stimulated”; “I am not at all interested/interested”. The reliability coefficient for this measure was 0.89.

4.2.6 Believability/reliability. This scale measures the attitude of a person concerning a specific advertisement emphasizing the likelihood of it holding and its credibility. It is composed of seven-point, ten, bi-polar adjectives from an instrument of Beltrami and Evans (1985). The sample items include unbelievable/believable; untrustworthy/trustworthy; not credible/credible. The reliability coefficient for this measure was 0.90.

5. Results
Descriptive statistics showing means, standard deviations and zero-order correlations are presented in Table 1.

5.1 Regression analysis of cognitive attitude, intrusiveness, evaluative judgments, affective response and moderating effects of reliability on “Aad”
The regression results were shown in Table 2. Columns 1 (step 1) from Table 2 show the regression analysis of predicting general attitude toward ads. The regression coefficients of cognitive attitude ($\beta = 0.40, p < 0.001$) was positive and significant thus supporting H1. The regression coefficient of intrusiveness is negative and significant ($\beta = -0.28, p < 0.001$) and thus supporting H2. The beta coefficient of evaluative judgments was not significant ($\beta = -0.009, p = 0.86$) thus not supporting H3. The beta coefficient affective response is positive and significant ($\beta = 0.19, p < 0.001$), thus supporting H4. The model was significant and explains 82.9% of the variance ($F = 381.75, p < 0.001; R^2 = 0.829$, and adjusted $R^2 = 0.827$) in general attitude toward Ad because of these independent variables.

5.2 Testing the moderation hypotheses
To test the moderation hypotheses, we followed the procedures outlined by Aiken and West (1991). In the step 2 (Column 2) of Table 2, we entered the multiplicative term between interaction terms cognitive attitude $\times$ reliability, intrusiveness $\times$ reliability, evaluative judgments $\times$ reliability and affective response $\times$ reliability to see their effect on Aad. The regression coefficient of interaction term cognitive attitude $\times$ reliability was positive and significant ($\beta = 0.053, p < 0.05$), thus supporting H1a. The regression coefficient of intrusiveness $\times$ reliability was positive and significant ($\beta = 0.056, p < 0.05$), thus supporting H2a. However, the regression coefficient of interaction term evaluative judgments $\times$ reliability is not significant ($\beta = -0.043; p = 0.14$), thus not supporting H3a. Finally, the interaction term, affective response $\times$ reliability is negative and significant ($\beta = -0.136; p < 0.001$), thus supporting H4a. The model was significant and explained 84.7% variance in the Aad because of these interactions (as well as main variables) ($F = 239.50, p < 0.001; R^2 = 0.847$, and adjusted $R^2 = 0.843, \Delta F = 11.38, p < 0.001; \Delta R^2 = 0.018$). These results support the three of the moderation hypotheses (H1a, H2a and H4a).

The interaction graphs are presented in Figures 2–4.

The moderating effect of reliability in the relationship between cognitive attitude and general attitude is shown in Figure 2. The interaction graph reveals that higher levels of reliability are associated with higher levels of general attitude toward Ad than at lower levels of reliability. As cognitive attitude is increasing from low to high, the Aad is also increasing (positive slope). These results support H1a.

The moderating effect of reliability in the relationship between intrusiveness and Aad is shown in Figure 3. As expected, the relationship between the intrusiveness and Aad is
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<th>Mean</th>
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<th>5</th>
<th>6</th>
<th>7</th>
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<tbody>
<tr>
<td>1. Cognitive attitude</td>
<td>4.33</td>
<td>1.40</td>
<td>1</td>
<td></td>
<td></td>
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<tr>
<td>2. Intrusiveness</td>
<td>3.64</td>
<td>1.84</td>
<td>-0.630***</td>
<td>1</td>
<td></td>
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<td>3. Evaluative judgments</td>
<td>3.15</td>
<td>0.76</td>
<td>0.756***</td>
<td>-0.730***</td>
<td>1</td>
<td></td>
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<td>4. Affective response</td>
<td>1.44</td>
<td>0.44</td>
<td>0.725***</td>
<td>-0.672***</td>
<td>0.750***</td>
<td>1</td>
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<tr>
<td>5. Reliability</td>
<td>1.52</td>
<td>0.46</td>
<td>0.766***</td>
<td>-0.693**</td>
<td>0.748***</td>
<td>0.615***</td>
<td>1</td>
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<tr>
<td>6. Aad</td>
<td>4.25</td>
<td>1.41</td>
<td>0.760***</td>
<td>-0.709***</td>
<td>0.732***</td>
<td>0.742***</td>
<td>0.758***</td>
<td>1</td>
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<tr>
<td>7. Purchase intention</td>
<td>1.56</td>
<td>0.49</td>
<td>-0.567***</td>
<td>-0.548**</td>
<td>0.606***</td>
<td>-0.750***</td>
<td>-0.633***</td>
<td>-0.611***</td>
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Note(s): ***p < 0.001

Table 1. Descriptive statistics: means, standard deviations and correlations
negative (which can be seen in the downward slope of the curve). As can be seen in the figure, intrusiveness is increasing from low to high, there is steep decline in the Aad at lower levels of reliability than at higher levels of reliability. These results support H2a.

The moderating effect of reliability in the relationship between affective response and Aad is shown in Figure 4. Affective response is positively related to general attitude, which can be seen from the positive slope. However, at higher levels of reliability, affective response is associated with higher levels of Aad than at lower levels. These results support H4a.

To test H5, logistic regression was performed because the dependent variable was purchase intention which is a dichotomous variable. The results of binary logistic regression were presented in Table 3. The results showed that the full logistic regression model...
containing the Aad as the predictor of purchase intention was statistically significant ($\chi^2 = 300.69; p < 0.001$). The beta coefficient of Aad was positive and significant ($\beta = 1.606$, $p < 0.001$). The results show the logistic regression coefficients, Wald test and odds ratios for
the predictor variable, i.e. Aad. The results of Cox and Snell, and Nagelkerke $R^2$ estimates indicated that the whole model explained between 46 and 62% of the variance that can be predicted from the independent variable. The model classified correctly 83.3% of those who were classified as having purchase intention. The model was significant ($-2 \log \text{Likelihood} = 300.69; \text{Nagelkerke } R^2 = 0.62; \text{Hosmer and Lemeshow Test } \chi^2 = 7.000; p = 0.54$). These results support H5 that Aad is positively related to purchase intention.

6. Discussion

The research into the consequences of the Aad has burgeoned since the seminal papers by several researchers (Lutz, 1985; MacKenzie et al., 1986; MacKenzie and Lutz, 1989; Mehta, 2000). Following this trend, researchers have examined the relationship between Aad and attitude toward the brand ($A_d$) and purchase intention of consumers (Dianoux et al., 2012; Homer, 2006; Spears and Singh, 2004). Drawing on the theory of planned behavior (TPB) of Fishbein and Ajzen (1975), we developed a conceptual model that links the antecedents of the Aad to purchase intention, moderated by the perceived “reliability” of advertisement.

The results from this study make several theoretical contributions to the literature on advertising. First, the results from the present study reveal that (1) cognitive attitude and affective responses are positively related to Aad, and (2) intrusiveness is negatively related to Aad. The results also reveal that evaluative judgments are not related to Aad. These results are consistent with the results from previous studies (Singh and Vij, 2008; Singh et al., 2020). Second, the results show that reliability is a moderator in the relationship between cognitive attitude, intrusiveness, affective responses and Aad. Since there were no other studies available to vouch for the moderation effect of reliability, we expect future studies can re-test this moderation. Third, the results corroborate the findings from previous researchers that Aad is positively related to purchase intention. However, reliability did not moderate the relationship between evaluative judgments and Aad. The present study adds to the earlier studies conducted in India (Singh and Vij, 2011; Vij, 2012, 2013).

While the present study contributes to the literature on advertising, one point is worth noting. The concept of the Aad has been studied for over three decades and many wonder why this has been studied again. Though the concept is old, the motivation for the present study comes from the application of it in today’s world, especially concerning women customers. A second important aspect is the moderating role of reliability/believability in that the antecedents have on Aad. If we look at the latest literature, none of the researchers have examined this link and, in this way, the study is novel. However, the researchers need to understand the importance of emerging concepts such as consumers’ attitude toward social media such as Facebook, Instagram, LinkedIn and see how they affect cognitive attitude toward ad. During the last decade, with the surge of technology and digital literacy and selling, customers are getting influenced as some researchers documented (Gaber et al., 2019; Souiden et al., 2017). Customers from India are no exception to this.

6.1 Theoretical implications

The results from the study have several theoretical implications. First, the results provide compelling evidence of the importance of cognitive attitude toward ad, intrusiveness attitude toward ad and affective response in influencing the consumers Aad. Surprisingly, the study did not indicate that evaluative judgments about ad do not influence the Aad. These results add to the literature as these are consistent with the results from previous studies. Second, the study underscores the importance of the reliability of ad in strengthening the relationship between various antecedents and Aad. However, it is found that reliability does not interact with evaluative judgments to influence Aad. Third, a key contribution of the study is that while intrusiveness plays a negative role, organizations need to consider avoiding placing the
advertisements at wrong places, wrong times, to avoid criticism from consumers. Fourth, the present study adds to the advertising literature by highlighting the importance of “timing” of ads at appropriate places to elicit a positive response from the customers. Further, it would not be out of context to remind that placing the advertisement at inappropriate places may increase the distaste for the products and may also have an adverse effect on the celebrities endorsing the product. Fifth, our results add to the vast literature on advertising that consumer’s intention to purchase depends on attitude toward ad. To sum, the results provide strong support to the existing theory of advertising and bear testimony to the antecedents of Aad.

6.2 Managerial implications
The results from the present research offer several managerial implications. First, the results provide support to the existing theory of advertising and bear testimony to the antecedents of the Aad. Second, the reliability of ad plays an important role in influencing the consumers Aad. While intrusiveness plays a negative role, organizations need to consider avoiding placing the advertisements at the wrong places and at wrong times to avoid criticism from the consumers. This brings to the importance of timing of ads at appropriate places, rather than placing them at random. Often, customers skip ads when they feel intriguing and disturbing. Instead of receiving a positive impression about the product, consumers develop a negative feeling about both the product and the companies as well as celebrities involved in such advertisements. Choosing appropriate social media as a platform is very important in this connection (Smith et al., 2012; Voorveld et al., 2018). Organizations using advertisements as a medium of communication about their products and brands need to acknowledge the cognitive and affective components of consumers that may influence their Aad. Considering the present coronavirus disease 2019 (COVID-19) global pandemic, as most customers are getting habituated to the concept of work-from-homes, managers should be mindful of the stress on the consumers imposed by advertisements that bring displeasure by frequent intermission of commercials between the television programs.

Third, from a managerial standpoint, increasing the use of ads in fashion magazines, television commercials, should consider, in addition to the potential benefits of such ads, the problems involved in intrusiveness. Considering the latest trend, the managers also should consider the role of social media in influencing the Aad ($A_{ad}$) of consumers and their impact on purchase intention (Knoll, 2016; Voorveld et al., 2018). With the growth in technology and the digital revolution, there is increasing awareness about the potential benefits of both in-store and online shopping, and celebrity endorsements in social media play a vital role in advertising. Fourth, the managers are also cognizant about the low-cost advertisement modes such as short messaging services (SMS) as some researchers documented (Rajesh et al., 2019). The Aad is increasingly influenced by mobile technology. With the technological revolution, affordable high-speed broadband connections are available and hence consumers are increasingly adopting smart mobile devices, which in turn, have an impact on Aad (Lamberton and Stephen, 2016). Managers therefore should consider the role of mobile devices in changing the attitude of consumers toward ad.

Fifth, considering the present-day COVID-19 global pandemic, the consumers’ attitude toward ad has undergone change and managers need to focus on changing their strategies to incorporate health concerns about the products (Karamchandani et al., 2021). Further, with growth in digital technology, consumers are increasingly using smartphones to make purchases and hence smartphone advertising has been influencing the consumers (Martins et al., 2019).

6.3 Limitations and suggestions for future research
The present research is not without any limitations. First, as with any survey data, the common method is a potential problem, and the present study is not an exception to this.
However, to reduce the common method bias, we followed the procedures advocated by Podsakoff et al. (2003). We did the one-factor analysis and verified the internal validity of the instrument. Further, we used an already tested instrument in collecting data. The second problem is multicollinearity and to counter this problem we centered the variables. We also checked the variance inflation factor (VIF) and the values are less than 2.0, which vouches that multicollinearity is not a problem in this research. Third, social desirability is another problem in social science research involving survey instruments. We expressly stated, while collecting data, that the information will be kept confidential so that the respondents become unbiased in their answers.

The results from the present study provide several avenues for future research. In the present research, we focused on advertisements related to products consumed by women, and hence only women were considered as respondents. The present model also can be tested for products consumed by both men and women and see if the results are different. We hope that the results will be generalizable irrespective of the type of product and respondents. Second, future researchers also can examine the causal sequence of these antecedents. That is to say, they can test independent hypotheses (rather than using these antecedents collectively). Some of the previous researchers have used dual mediation hypotheses and rarely considered independent influence hypotheses (Brown and Stayman, 1992). Third, this model is tested in India and future researchers can see cultural differences by comparing the behavior of respondents in Western countries with developing nations such as India, Pakistan and Bangladesh. Fourth, future researchers also can identify some other moderators such as celebrity characteristics that may influence the general attitude toward ad by consumers. Further, future researchers may study the influence of social and cultural factors in general attitude toward ad. Finally, as the nature of advertising has undergone paradigmatic change during the global pandemic, COVID-19, it would be interesting to explore the change the general attitude toward ad by the consumers (Taylor, 2020).

6.4 Conclusion
To conclude, the present research is a modest attempt to develop a conceptual model, and derive testable hypotheses and to our knowledge, antecedents of the general attitude toward ad were not studied by previous researchers. In that sense, it can be considered an exploratory study. While the results from the study corroborate the existing literature on advertising concerning a general attitude of consumers and their impact on purchase intention, organizations need to carefully understand the importance of cognition, beliefs, and affective responses of consumers for the advertisements. As aptly put by Brown and Stayman (1992) “efforts to understand the effects of ad attitudes appear to represent an ongoing stream of research on advertising effects” (p. 49). Most importantly, organizations need to carefully consider the effects of intrusiveness on advertising effectiveness. To counter the intrusiveness, it is suggested to have celebrities whose trustworthiness may enhance the reliability of ads and their effect on purchase intentions. With the paradigmatic change in the consumer attitude toward ad during the global pandemic, finding the new antecedents and boundary conditions for forming a general attitude toward ad remains on the research agenda.

References


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