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DOES NEED FOR COGNITION, NEED FOR AFFECT AND PERCEIVED HUMOUR INFLUENCE CONSUMERS' BRAND ATTITUDE?

***HAFIZAH OMAR ZAKI**

*Faculty of Economics and Management
Universiti Kebangsaan Malaysia*

**YUSNIZA KAMARULZAMAN
MOZARD MOHTAR**

*Faculty of Business and Accountancy
University of Malaya*

**Corresponding author: hafizah.omar@ukm.edu.my*

Abstract

Cognition has long been known as a mechanism to process message besides forming desirable attitude. However, the engagement of emotions that has been limited in its discussions to the message processing theory such as the Elaboration Likelihood Model (ELM) could also function as influencer to message processing and contributor to attitude formation. Hence, the purpose of this research is to examine the effects of need for cognition (NFC), need for affect (NFA) and perceived humour on consumers' attitude towards the brands advertised. The research engaged three main studies and has adopted a quantitative basic experimental design with a random selection and distribution of participants into treatment groups. Result of study 1 showed that advertising attitude mediates between NFC and brand attitude. Study 2 found that NFA moderates between NFC and brand attitude.

Study 3 revealed that NFA moderates between perceived humour and brand attitude. Finally, the results also determined that NFC, NFA, and perceived humour influence the processing of advertising message in the low and high involvement conditions of message elaborations. The findings encourage future researchers to further assess consumers' attitude towards brand in various advertising contexts in more detail. The study contributes to the advertising guidelines for advertising firms and policy makers. In addition, the study contributes to the theoretical establishment of the Elaboration Likelihood Model (ELM) that can be used for future research extension.

Keywords: *Brand attitude, involvement, need for cognition, need for affect, perceived humour.*

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Introduction

The advertising industry worldwide has engaged itself in the use of various messages and appeals in an effort to promote brands. In the Western countries, humour appeals and messages for instance are more prevalent and are accepted by the Western society. On this note, humour messages and appeals used in advertising has been considered a successful strategic tool to persuade and draw attention (Eisend, 2009). However, in Asian countries, especially Malaysia, a more rational and emotional appeals are being used in advertisements and are considered more acceptable. However, the question in this study does not concern whether the advertising engages emotional, humour or non-humorous appeals. The subject deals with whether consumers are able to articulate the advertising message or contents cognitively and emotionally in order to form favourable brand evaluation. This is because good brand evaluations require the ability and motivation to process messages or information contained in an advertisement (Petty & Cacioppo, 1986). In essence, processing an advertising message or contents may not be an easy task as consumers are human and human are affected by their thought process and state of unstable emotions (Gross & John, 1997). Fundamentally, consumers are different psychologically and behaviourally in their response to a message and stimulus.

Evidently, the disparities in consumers level of ability to cognitively process advertising message, differences in emotions and perceptions may lead to unfavourable evaluations of the advertising and brand (Crawford & Gregory, 2015; Jurca & Madlberger, 2015). Although advertising may seem entertaining and persuasive, the interpretations by consumers may vary and may at times hurt brand (Newton, Wong & Newton, 2016; Weinberger, Swani, Yoon & Gulas, 2017; Yoon, 2015; Yoon & Tinkham, 2013). Therefore, this paper argues that there is inadequate empirical evidence on the effects of need for cognition (NFC), need for affect (NFA) and perceived humour on consumers' attitudinal response to brand advertised in the low vs. high involvement condition (Alden & Hoyer, 1993; Eisend, 2009; 2018; Mulligan & Scherer, 2012). In a nutshell, the purpose of this research is to assess the processing of advertising message and evaluation of brand, by examining (1) the effect of need for cognition (NFC) on brand attitude when mediated by advertising attitude, (2) the effect of NFC on brand attitude when moderated by need for affect (NFA), and (3) the effect of perceived humour on brand attitude when moderated by NFA.

Literature Review

Need for Cognition

The Elaboration Likelihood Model (ELM) suggests that people use their cognitive ability to process message or information and are persuaded by what they see and experience. Thus, the ELM advocates that low cognitive ability is represented by the low involvement elaborative condition, while the high cognitive ability is represented by the high involvement elaborative condition (Pantoja, Rossi & Borges, 2016; Petty & Cacioppo, 1986; Olsen, Slotegraaf & Chandukala, 2014). The cognitive ability is predominantly assessed by the need for cognition (NFC). NFC is thus, known as an issue pertinent to thinking and can be defined as the ability or motivation an individual has to process message or information (Petty & Cacioppo, 1986). Recent evidence in advertising suggest that consumers with high NFC favoured brand entailing verbal and textual information more as compared to that entailing visual and audio information (Burton, Gollins, McNeely & Walls, 2018; Kim, 2019; Myers & Jung, 2019; Vashisht, Royne & Sreejesh, 2019). This is true as those with high cognitive ability prefer messages or information necessitating deep evaluations, whereas

those with low cognitive ability prefer simple and attractive cues (Petty & Cacioppo, 1986). In support of the above findings, consumers with low cognitive ability favoured brand despite the message intensity as long as attractive cues such as sound, visual and appeals are presented in an advertisement (Eisend, 2018; Walter, Cody, Xu & Yoon, 2015; Yoon, 2018).

Different levels of involvement conditions are also found to be influencing NFC, where those low in NFC process information in the low involvement condition, and those with high NFC, tend to process information in the high involvement condition (Bitner & Obermiller, 1985; Petty & Cacioppo, 1986). NFC is also found to be effecting brand attitude directly and indirectly (Cyr, Head, Lim & Stibe, 2018; Limbu, Huhmann & Peterson, 2012; Petty & Brinol 2015; Scherer & Moors, 2019). Moreover, past research has also revealed a mediation of advertising attitude between NFC and brand attitude (Spiellmann, 2014; Zhang, 1999; Zhang & Zinkhan, 2006). Although the abovementioned effects have been studied, consumers' response to NFC and brand attitude for low and high involvement elaborative conditions in an advertising context in Malaysia is still scarce. Likewise, the effect of NFC on advertising and brand attitude in the context of low vs. high involvement elaborative conditions is also still under study. Therefore, it is hypothesised that;

- H₁: (a) There is a significant difference in consumers' response to NFC and brand attitude for low vs. high involvement elaborative condition.
- (b) Advertising attitude mediates the relationship between NFC and brand attitude.

Need for Affect

Although the Elaboration Likelihood Model (ELM) holds strong belief that message processing and attitude formation are solely driven by the cognitive ability, there is limited empirical evidence that examines emotions as mechanism that can influence elaboration of message and in forming good attitude outcome (Kitchen, Kerr, Schultz, McColl & Pals, 2014; Morris, Woo & Singh, 2005; Petty & Brinol 2015; Warren, Carter & McGraw, 2018). On this view, emotions represented by need for affect (NFA), influences changes in attitude and behaviour of an individual upon receiving messages or information (Batra & Ray, 1986; Gross & John, 1997; Holbrook & O'Shaughnessy, 1984). Earlier

research on the effects of need for affect (NFA) on brand attitude has also been empirically studied (Bakhtiyari, Ziegler & Husain, 2016; Cartwright, McCormick & Warnaby, 2016; Hamelin, Moujahid & Thaichon, 2017; Phua & Kim, 2018). Recent evidence on the studies of NFA in advertising suggests that positive emotions that arose from viewing advertisement with happy messages or contents led to forming positive attitudinal response towards brand (Bakhtiyari et al., 2016; Choi, Rangan & Singh, 2016; Cockrill & Parsonage, 2016; Cohen, 2014; Poels & Dextite, 2019). On the contrary, negative emotions developed upon viewing intimidating advertising message or contents encouraged negative attitudinal response on brand (Lewis, Forward, Elliott, Kaye, Fleiter & Watson, 2019; Lacellotti & Thomas, 2018; Hamelin et al., 2017; Kujur & Singh, 2018).

Moreover, it has also been revealed that consumers with high emotions responded favourably to brand presenting cues, images or attractive sources rather than a textual advertising (Nikolinakou & King, 2018; Poels & Dewitte, 2019; Raza, Bakar & Mohamad, 2018). This is true as those with high emotions possess intense emotional response and can easily process information in the low involvement condition, as compared to those with low emotions (Bitner & Obermiller, 1985). Likewise, NFA is also found to have direct effect on brand attitude (Raza et al., 2018), and that NFA can also moderate between an antecedents and outcome variables (Batra & Ray, 1986; Gross & John, 1997; Holbrook, 1984; Poels & Dextite, 2019). Despite the proven direct and indirect effects of emotions on brand attitude, there were very few studies that addressed NFA as moderator between need for cognition (NFC) and brand attitude in an advertising context. Differences in consumers' response to NFA and brand attitude for low vs. high involvement elaborative condition are also under researched. Therefore, it is hypothesised that;

- H₂: (a) There is a significant difference in consumers' response to NFA and brand attitude for low vs. high involvement elaborative condition.
 (b) NFA moderates the relationship between NFC and brand attitude.

Perceived Humour

Perceived humour is known as the individual's ability to sense what is funny or amusing through the expressions of speech, writing or

behavioural outcome (Martin & Ford, 2018). Perceived humour functions as a mechanism to persuade, attract and gain consumer's attention (Eisend, 2018; Warren et al., 2018). Distinctly, perceptions about humour in advertising can produce diverse responses to the advertising or brand depending on the types and conditions of the humour being imposed (Eisend, 2009). The literature found that consumers' perception to humour increased when simple and attractive cues outweigh message claims (Petty & Brinol 2015). Likewise, previous studies about advertising revealed that perceived humour occurs not only in humorous advertisements but can also transpire in non-humorous advertisements (Alden, Mukherjee & Hoyer, 2000; Eisend 2009; Galloway, 2009; Martin & Ford, 2018; Spielmann, 2014). Therefore, it is understood that perception about humour does not only derived from a humorous stimulus but also occurred across different individuals, diverse stimulus and experiences.

In the same vein, an array of studies on the effect of perceived humour on consumers' attitudinal response to brand advertised has also been conducted (Eisend, 2018; Newton et al., 2016; Spielmann, 2014; Schwarz, Hoffmann & Hutter, 2015; Yoon 2018). Perceived humour is found to be affecting brand attitude directly (Eisend, 2009), or even indirectly through the influence of cognitive and affective-base conditioning such as emotions by itself (Martin & Ford, 2018; Warren et al., 2018). However, past studies focused more on the effect of humour types, humour conditions, and humour mechanisms on brand advertised, but very less on how perceived humour of non-humour advertising is affecting brand. Thus, the effect of perceived humour on brand attitude moderated by need for affect (NFA) in a non-humorous advertising context is still scarce. The difference in consumers' response to perceived humour and brand attitude for low vs. high involvement elaborative conditions is also limited. Therefore, it is hypothesised that;

- H₃: (a) There is a significant difference in consumers' response to perceived humour and brand attitude for low vs. high involvement elaborative condition.
(b) NFA moderates between perceived humour and brand attitude.

Methodology

The research adopted a basic quantitative experimental design comparing treatment conditions. The participants were randomly

selected among the public and placed into six different treatment conditions that were available in three main studies (Table 1). Study 1 aimed at achieving hypotheses 1a and 1b. Study 2 aimed at achieving hypotheses 2a and 2b, whereas study 3 aimed at achieving hypotheses 3a and 3b.

Table 1

Placement of Participants per Study and Treatment Conditions

| Experimental studies | Treatment conditions (Advertisements) | Number of participants |
|----------------------|---------------------------------------|------------------------|
| Study 1 | Low Involvement | 30 |
| | High Involvement | 30 |
| Study 2 | Low Involvement | 69 |
| | High Involvement | 62 |
| Study 3 | Low Involvement | 34 |
| | High Involvement | 35 |

Two advertising stimuli in the form of digital videos have been adopted from the www.adsoftheworld.com that can also be retrieved from YouTube. The two advertisements represented low involvement elaborative condition (i.e., consumer product ad) and high involvement elaborative condition (i.e., luxurious product ad). The advertisements were validated by five expert panels comprising three academicians and two others from an advertising agency. To ensure reliability of the advertisements, a pre-test has been conducted on the two advertisements by assessing the participants' familiarity of brand and participants' English language proficiency. The pre-test results confirmed that participants were not familiar with the brand advertised in the low involvement ($M=3.37$) and in the high involvement ($M=3.44$) conditions. Likewise, they were well-versed in understanding the English language used in the ads for both low involvement ($M=5.25$), and high involvement ($M=6.33$) condition.

Once the advertisements have been validated through pretesting, the advertisements were used in three main experimental studies

(Table 1). In each of the three studies, participants who were placed randomly into the low and high involvement conditions were each made to watch an advertisement. A set of validated questionnaires was then given to the participants to be answered subsequently. The questionnaire data were analysed using the statistical package for social sciences (SPSS) version 25.

Results

All questionnaires from all the six conditions in the three studies were returned and analysed. Data cleaning was conducted and there were no missing data from all three studies. The assumption for outliers, normality, validity and reliability for every item in all three studies have been analysed and met. In achieving the hypotheses in the three studies, an independent sample t-test was conducted to compare the differences in the constructs' response to low and high involvement elaborative conditions. A regression analysis measuring direct and indirect effects was also conducted in all three studies using Hayes PROCESS macro version 3.3.

Study 1

With regards to need for cognition (NFC) as presented in Table 2, the Levene's test of variance is not significant $F=21.28, p>0.05$. This implies that equal variances are assumed. Likewise, a significant difference $t(58)=6.30, p<0.05$ was found in the scores for low involvement ($M=3.54, SD=1.18$), and high involvement ($M=5.12, SD=0.69$) conditions. This indicates that involvement has an effect on NFC. Specifically, the result suggests that when NFC is high, processing of advertising message occurs in the high involvement condition; whereas, when NFC is low, the processing of advertising message appears in the low involvement condition making them process limited advertising message. This is true for those with high cognitive ability as compared to those with low cognitive ability who have the aptitude to process messages or information that contain(s) higher information or contents claims (Bitner & Obermiller, 1985; Pantoja et al., 2016; Olsen et al., 2014). Therefore, Hypothesis 1a was supported.

As for brand attitude (Table 2), the Levene's test of variance is also not significant $F=1.81, p>0.05$. This indicates that equal variances

are assumed. Moreover, a significant difference $t(58)=11.92$, $p<0.05$ was found in the scores for low involvement ($M=4.89$, $SD=0.55$) and high involvement ($M=6.42$, $SD=0.44$) conditions. The result implies that involvement has an effect on brand attitude. More specifically, the result suggests that when consumers watch the advertisement in the high involvement condition, they favoured the brand more as compared to that shown in the low involvement condition. The result was consistent with prior findings where stimulus presented in a high involvement condition has more message strength in its brand representation to attract attention (Bitner & Obermiller, 1985; Pantoja et al., 2016; Olsen et al., 2014). Therefore, Hypothesis 1a was supported.

Table 2

Independent Sample T-test for Study 1

| Response scale | Independent sample t-test | | | | | | |
|-------------------------|---------------------------|------|----------------------------|--------|-------|----|----------|
| | Descriptive | | Levene's test of variances | | | | Sig diff |
| | Mean | SD | F | t | Sig. | df | Sig. |
| Need for cognition: | | | | | | | |
| Low involvement ad | 3.54 | 1.18 | | | | | |
| High involvement ad | 5.12 | 0.69 | | | | | |
| Equal variances assumed | | | 21.28 | -6.30 | 0.078 | 58 | 0.000* |
| Brand attitude: | | | | | | | |
| Low involvement ad | 4.89 | 0.55 | | | | | |
| High involvement ad | 6.42 | 0.44 | | | | | |
| Equal variances assumed | | | 1.81 | -11.92 | 0.183 | 58 | 0.000* |

* $p<0.05$

The result of regression analysis for study 1 (Table 3) shows the Hayes Model 4 result which indicates that the need for cognition (NFC) was a significant predictor of advertising attitude (A_{Ad}), $b=0.778$, $SE=0.152$, $p<0.05$ and advertising attitude (A_{Ad}) was a significant predictor of brand attitude (A_{Brand}) $b=0.276$, $SE=0.054$, $p<0.05$. The result also reveals that NFC was still a significant predictor of brand attitude (A_{Brand})

$b=0.241$, $SE=0.076$, $p<0.05$. About 58 percent of the variance in brand attitude (A_{Brand}) was accounted for by the predictors ($R^2=0.575$). The result, therefore, showed that the indirect coefficient was significant, $b=0.215$, $SE=0.049$, 95 percent $CI=0.115, 0.394$. This indicates that the need for cognition (NFC) was associated with brand attitude (A_{Brand}) scores that were about 0.21 points higher as mediated by advertising attitude (A_{Ad}). This finding was consistent with prior research by Burton et al. (2018) that NFC can affect brand attitude (A_{Brand}) through the influence of advertising attitude (A_{Ad}). NFC can also directly affect brand attitude (A_{Brand}) (Walter et al., 2018). Therefore, Hypothesis 1b was supported.

Table 3

Regression Analysis for Study 1

| Model summary | | | | |
|------------------------------|-----------|-------|--------|----------------|
| | Coeff (B) | SE | P | R ² |
| NFC - A_{Ad} | 0.778 | 0.152 | 0.000* | 0.311 |
| A_{Ad} - A_{Brand} | 0.276 | 0.054 | 0.000* | 0.575 |
| NFC - A_{Brand} | 0.241 | 0.076 | 0.003* | 0.575 |
| Indirect effect of X on Y | Coeff (B) | SE | LLCI | ULCI |
| NFC - A_{Ad} à A_{Brand} | 0.215 | 0.049 | 0.115 | 0.394 |

* $p<0.05$

Study 2

In relation to need for affect (NFA) as exhibited in Table 4, the Levene’s test of variance is also not significant $F=9.34$, $p>0.05$, and thus equal variances are assumed. A significant difference $t(129)=12.96$, $p<0.05$ was found in the scores for low involvement ($M=5.64$, $SD=1.03$) and high involvement ($M=3.03$, $SD=1.27$) condition. This suggests that involvement has an effect on NFA. The results denote that when NFA is high, the processing of advertising message occurs in the low involvement condition; whereas, when NFA is low, the processing of advertising message appears in the high involvement condition. Such outcome is deemed accurate as those with high emotions as compared to those with low emotions who are emotionally driven and are more easily attracted towards attractive cues which are mostly presented

in a low involvement condition (Gross & John, 1997; Holbrook, 1984; Olsen et al., 2014). With this, Hypothesis 2a was supported.

Consistently, for brand attitude (Table 4), the Levene's test of variance is also not significant $F=3.60$, $p>0.05$, hence equal variances are assumed. A significant difference $t(129)=14.60$, $p<0.05$ was found in the scores for low involvement ($M=3.65$, $SD=0.81$) and high involvement ($M=5.59$, $SD=0.69$) conditions. The result, thus, suggests that involvement does have an effect on brand attitude. The result also implies that when participants watch the advertisements presented in the high involvement condition, they favour the brand more. The result was coherent with past findings where stimulus presented in the high involvement condition has more message strength in its brand representation (Bitner & Obermiller, 1985; Pantoja et al., 2016; Olsen et al., 2014). Therefore, Hypothesis 2a was supported.

Table 4

Independent Sample T-test for Study 2

| Response scale | Independent sample t-test | | | | | | |
|-------------------------|---------------------------|------|----------------------------|--------|-------|-----|----------|
| | Descriptive | | Levene's Test of Variances | | | | Sig Diff |
| | Mean | SD | F | t | Sig. | df | Sig |
| Need for Affect (NFA): | | | | | | | |
| Low Involvement ad | 5.64 | 1.03 | | | | | |
| High Involvement ad | 3.03 | 1.27 | | | | | |
| Equal variances assumed | | | 9.34 | 12.96 | 0.142 | 129 | 0.000* |
| Brand Attitude: | | | | | | | |
| Low Involvement ad | 3.65 | 0.81 | | | | | |
| High Involvement ad | 5.59 | 0.69 | | | | | |
| Equal variances assumed | | | 3.60 | -14.60 | 0.060 | 129 | 0.000* |

* $p<0.05$

The regression analysis result for study 2 as depicted in Table 5 shows Hayes Model 1 result which indicates that the need for cognition (NFC) was a significant predictor of brand attitude (A_{Brand}) $b=-1.46$, $SE=0.445$, $p<0.05$, and that need for affect (NFA) moderates between NFC and brand attitude $b=-0.897$, $SE=0.273$, 95 percent, $CI=-1.44$, -0.357 . Approximately 37 percent of the variance in brand attitude (A_{Brand}) was accounted for by the predictors ($R^2=0.372$). This indicated

that the need for cognition (NFC) was associated with brand attitude (A_{Brand}) scores that were about 0.37 points higher as moderated by the need for affect (NFA). This outcome was coherent with past research by Raza et al. (2018) where emotions can influence the affect of brand attitude (A_{Brand}) and cognitive ability can also affect brand attitude (A_{Brand}) through the influence of emotions (Poels & Dextitte, 2019). Such understanding is true as emotions can help regulate thinking process in forming attitude outcomes (Batra & Ray, 1986; Gross & John, 1997; Holbrook, 1984). Therefore, Hypothesis 2b was supported.

Table 5

Regression Analysis for Study 2

| Model summary | | | | |
|-------------------|-----------|-------|--------|----------------|
| | Coeff (B) | SE | P | R ² |
| NFC - A_{Brand} | -1.46 | 0.445 | 0.001* | 0.372 |
| Moderating Effect | Coeff (B) | SE | LLCI | ULCI |
| NFA | -0.897 | 0.273 | -1.44 | -0.357 |

* $p < 0.05$

Study 3

With regard to perceived humour in Table 6, the Levene’s test of variance is not significant $F=0.38, p>0.05$, hence assuming for equal variances. More so, a significant difference $t(67)=13.18, p<0.05$ was found in the scores for low involvement ($M=5.94, SD=0.74$) and high involvement ($M=3.43, SD=0.84$) conditions. This showed that involvement does have an effect on perceived humour. The results advocated that consumers perceived the advertising in the low involvement condition as more humorous than the advertisement presented in the high involvement condition. The result was coherent with prior study whereby perceived humour can transpire in a non-humorous advertising especially when attractive sources or stimulus are presented (Martin & Ford, 2018). Therefore, Hypothesis 3a was supported.

As for the brand attitude shown in Table 6, the Levene's test of variance is also not significant $F=3.74$, $p>0.05$, hence equal variance is assumed. A significant difference $t(67)=-13.36$, $p<0.05$ was found in the scores for low involvement ($M=4.88$, $SD=0.55$) and high involvement ($M=6.45$, $SD=0.42$) condition. The result explained that involvement does have an effect on brand attitude. The result suggests that when consumers watch advertisements in the high involvement condition, they favour the brand better. Just like in study 1 and 2, the result in study 3 was consistent with past findings where stimulus presented in the high involvement condition has more strength in its brand representation (Bitner & Obermiller, 1985; Petty & Cacioppo, 1986). Therefore, Hypothesis 3a was supported.

Table 6

Independent Sample T-test for Study 3

| Response scale | Descriptive | | Independent sample t-test | | | | Sig Diff Sig |
|-------------------------|-------------|------|---------------------------------|--------|-------|----|-----------------|
| | Mean | SD | Levene's Test of Variances F | t | Sig. | df | |
| Perceived humour: | | | | | | | |
| Low Involvement ad | 5.94 | 0.74 | | | | | |
| High Involvement ad | 3.43 | 0.84 | | | | | |
| Equal variances assumed | | | 0.38 | 13.18 | 54 | 67 | 0.000* |
| Brand Attitude: | | | | | | | |
| Low Involvement ad | 4.88 | 0.55 | | | | | |
| High Involvement ad | 6.45 | 0.42 | | | | | |
| Equal variances assumed | | | 3.74 | -13.36 | 0.067 | 67 | 0.000* |

* $p<0.05$

The regression analysis result for study 3 as depicted in Table 5 shows Hayes Model 1 result which is, perceived humour (PH) was a significant predictor of brand attitude (A_{Brand}) $b=-0.320$, $SE=0.156$, $p<0.05$, and that the need for affect (NFA) moderates between PH and brand attitude (A_{Brand}) $b=-0.334$, $SE=0.153$, 95 percent, $CI=-0.633, -.009$. Approximately, 53 percent of the variance in brand attitude (A_{Brand}) was accounted for by the predictors ($R^2=0.538$). This indicated that perceived humour (PH) was associated with brand attitude (A_{Brand}) scores that were about 0.53 points higher as moderated by the need for affect (NFA). This finding is consistent with the previous study by

Warren et al. (2018) whereby perceived humour was discovered to affect brand attitude directly, and also through a series of influences developed from emotions. Therefore, Hypothesis 3b was supported.

Table 7

Regression Analysis for Study 3

| Model summary | | | | |
|------------------------|-----------|-------|--------|----------------|
| | Coeff (B) | SE | P | R ² |
| PH -A _{Brand} | -0.320 | 0.156 | .044* | .538 |
| Moderating Effect | Coeff (B) | SE | LLCI | ULCI |
| NFA | -0.334 | 0.153 | -0.633 | -0.009 |

*P<0.05

Discussion

The effects of need for cognition (NFC), need for affect (NFA) and perceived humour on brand attitude have been examined experimentally. Consequently, the research concluded that firstly, consumers with high thinking ability articulate more about the advertising message presented in the high involvement condition, thus making them favoured the brand better. This is mainly because advertising with higher involvement of message or information motivates those with high thinking ability to articulate the advertising message better. Likewise, consumers’ thinking ability can influence their evaluation of brand directly, or indirectly through first evaluating the advertising presented. Conclusively, this confirmed that cognition through the Elaboration Likelihood Model (ELM) functions as the main driver in processing advertising messages.

Secondly, consumers with high emotions process less advertising messages that are presented in the low involvement condition due to the simple cues such as colours, shapes, image, or even audio existing in the advertisement. However, consumers who are low in emotions process advertising messages in the high involvement condition more due to the message claims or arguments that prevails in the

advertisement. This denotes that emotions can influence the process of advertising message. In view of this, bearing in mind that emotions regulate human physiological factors (Gokce, Mengenci, Arslan & Emhan, 2019), emotions are also proven to be influencing the effect of one's cognitive ability towards the evaluation of brand advertised.

Finally, consumers perceived the advertisement shown in the low involvement condition as humorous even though the advertisement lacks the humorous appeal. This is due to the fact that stimulus presented in the low involvement condition contains cues or attractive sources that may produce excitement and attract attention Bitner and Obermiller, 1985; Chang, 2014. Likewise, perceived humour can affect the evaluation of brand when influenced by emotions. Again, the ability of emotions to regulate human psychological factor serves the reason for the former (emotions) to be a moderator between an antecedent and an outcome variable.

Conclusion

In view of the findings, this research contributes in fulfilling the gap of the Elaboration Likelihood Model (ELM) in that cognition and emotions both play a vital role in influencing processing of advertising message and in forming good brand evaluations. The result of this research through ELM may serve as a reference for advertising firms to strategise new ways to promote brands. This research may also assist advertising regulator such as the Advertising Standards Advisory (ASA) to refurbish existing policies on advertising in Malaysia that would benefit advertising bodies, advertisers and consumers. This research is, however, limited in a sense that it focused only on functional appeal advertising. Future research should consider expanding the scope into engaging various advertising appeals, such as fear, emotional and humorous, which are still under researched in Malaysia. More so, the research used only basic quantitative experimental design which compares only treatment groups. Therefore, future research is recommended to use a quasi or factorial experimental design that engages comparisons between more control and treatment groups.

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References

- Alden, D. L., & Hoyer, W. D. (1993). An examination of cognitive factors related to humorousness in television advertising. *Journal of Advertising*, 22(2), 29-37.
- Alden, D. L., Mukherjee, A., & Hoyer, W. D. (2000). The effects of incongruity, surprise and positive moderators on perceived humor in television advertising. *Journal of Advertising*, 29(2), 37-41.
- Bakhtiyari, K., Ziegler, J., & Husain, H. (2016). *The effect of presentation in online advertising on perceived intrusiveness and annoyance in different emotional states*. Proceeding, pp. 140-149.
- Batra, R., & Ray, M. L. (1986). Affective responses mediating acceptance of advertising. *Journal of consumer research*, 13(2), 234-249.
- Bitner, M. J., & Obermiller, C. (1985). The elaboration likelihood model: Limitations and extensions in marketing. *ACR North American Advances*, 12, 420-425.
- Burton, J. L., Gollins, J., McNeely, L. E., & Walls, D. M. (2019). Revisiting the relationship between ad frequency and purchase intentions: How affect and cognition mediate outcomes at different levels of advertising frequency. *Journal of Advertising Research*, 59(1), 27-39.
- Cartwright, J., McCormick, H., & Warnaby, G. (2016). Consumers' emotional responses to the christmas tv advertising of four retail brands. *Journal of Retailing and Consumer Services*, 29, 82-91.
- Chang, C. (2014). When new commercials do not meet expectations. *Journal of Advertising*, 43(4), 359-370.
- Choi, J., Rangan, P., & Singh, S. N. (2016). Do cold images cause cold-heartedness? The Impact of visual stimuli on the effectiveness of negative emotional charity appeals. *Journal of Advertising*, 45(4), 417-426.
- Cockrill, A., & Parsonage, I. (2016). Shocking people into action: Does it still work? An empirical analysis of emotional appeals in charity advertising. *Journal of Advertising Research*, 56(4), 401-413.
- Cohen, E. L. (2014). What makes good games go viral? The role of technology use, efficacy, emotion and enjoyment in players'

- decision to share a prosocial digital game. *Computers in Human Behavior*, 33, 321-329.
- Crawford, H. J., & Gregory, G. D. (2015). Humorous advertising that travels: A review and call for research. *Journal of Business Research*, 68(3), 569-577.
- Cyr, D., Head, M., Lim, E., & Stibe, A. (2018). Using the elaboration likelihood model to examine online persuasion through website design. *Information and Management*, 55(7), 807-821.
- Eisend, M. (2009). A Meta-analysis of humor in advertising. *Journal of The Academy of Marketing Science*, 37(2), 191-203.
- Eisend, M. (2018). Explaining the use and effects of humour in advertising: An evolutionary perspective. *International Journal of Advertising*, 37(4), 526–547.
- Galloway, G. (2009). Humor and ad liking: Evidence that sensation seeking moderates the effects of incongruity-resolution humor. *Psychology & Marketing*, 26(9), 779-792.
- Gross, J. J., & John, O. P. (1997). Revealing feelings: Facets of emotional expressivity in self-reports, peer ratings, and behavior. *Journal of Personality and Social Psychology*, 72(2), 435.
- Gokce, S. G., Mengenci, C., Arslan, V., & Emhan, A. (2019). The effects of emotional regulation and political perception on job satisfaction: an empirical research study in the Turkish health sector. *International Journal of Management Studies*, 26(1), 55-71.
- Hamelin, N., Moujahid, O. El, & Thaichon, P. (2017). Emotion and advertising effectiveness: A novel facial expression analysis approach. *Journal of Retailing and Consumer Services*, 36(January), 103-111.
- Holbrook, M. B., & O’Shaughnessy, J. (1984). The role of emotion in advertising. *Psychology & Marketing*, 1(2), 45-64.
- Jurca, M. A., & Madlberger, M. (2015). Ambient advertising characteristics and schema incongruity as drivers of advertising effectiveness. *Journal of Marketing Communications*, 21(1), 48-64.
- Kitchen, J. P., Kerr, G., E. Schultz, D., McColl, R., & Pals, H. (2014). The elaboration likelihood model: Review, critique and research agenda. *European Journal of Marketing*, 48(11/12), 2033-2050.
- Kim, M. (2019). Digital product presentation, information processing, need for cognition and behavioral intent in digital commerce. *Journal of Retailing and Consumer Services*, 50, 362-370.
- Kujur, F., & Singh, S. (2018). Emotions as predictor for consumer engagement in YouTube advertisement. *Journal of Advances in Management Research*, 15(2), 184-197.

- Lancellotti, M. P., & Thomas, S. (2018). Men hate it, women love it: Guilty pleasure advertising messages. *Journal of Business Research*, 85, 271-280.
- Limbu, Y. B., Huhmann, B. A., & Peterson, R. T. (2012). An examination of humor and endorser effects on consumers' responses to direct-to-consumer advertising: The moderating role of product involvement. *International Journal of Pharmaceutical and Healthcare Marketing*, 6(1), 23-38.
- Lewis, I., Forward, S., Elliott, B., Kaye, S. A., Fleiter, J. J., & Watson, B. (2019). Designing and evaluating road safety advertising campaigns. In (Author - Eds) *Traffic Safety Culture: Definition, Foundation, and Application* (pp. 297-319). Place: Emerald Publishing.
- Martin, R. A., & Ford, T. (2018). *The psychology of humor: An integrative approach*. Place: Academic Press.
- Myers, J., & Jung, J. M. (2019). The interplay between consumer self-view, cognitive style, and creative visual metaphors in print advertising. *Journal of Marketing Communications*, 25(3), 229-246.
- Morris, J. D., Woo, C., & Singh, A. J. (2005). Elaboration likelihood model: A missing intrinsic emotional implication. *Journal of Targeting, Measurement and Analysis for Marketing*, 14(1), 79-98.
- Mulligan, K., & Scherer, K. R. (2012). Toward a working definition of emotion. *Emotion Review*, 4(4), 345-357.
- Newton, J. D., Wong, J., & Newton, F. J. (2016). Listerine - For the bridesmaid who's never a bride disparaging humour increases brand attitude and recall among the powerless. *European Journal Of Marketing*, 50(7-8), 1137-1158.
- Nikolinakou, A., & King, K. W. (2018). Viral video ads: Emotional triggers and social media virality. *Psychology & Marketing*, 35(10), 715-726.
- Olsen, M. C., Slotegraaf, R. J., & Chandukala, S. R. (2014). Green claims and message frames: how green new products change brand attitude. *Journal of Marketing*, 78(5), 119-137.
- Pantoja, F., Rossi, P., & Borges, A. (2016). How product-plot integration and cognitive load affect brand attitude: A replication. *Journal of Advertising*, 45(1), 113-119.
- Petty, R. E., & Brinol, P. (2015). Emotion and persuasion: Cognitive and meta-cognitive processes impact attitudes. *Cognition and Emotion*, 29(1), 1-26.

- Petty, R. E., & Cacioppo, J. T. (1986). The elaboration likelihood model of persuasion. In (Author) *Communication and Persuasion* (pp. 1-24). Springer, New York: New York.
- Phua, J., & Kim, J. (Jay). (2018). Starring in your own snapchat advertisement: Influence of self-brand congruity, self-referencing and perceived humor on brand attitude and purchase intention of advertised brands. *Telematics And Informatics*, 35(5), 1524-1533.
- Poels, K., & Dewitte, S. (2019). The role of emotions in advertising: A call to action. *Journal of Advertising*, 48(1), 81-90.
- Raza, S. H., Bakar, H. A., & Mohamad, B. (2018). Advertising appeals and malaysian culture norms. *Journal of Asian Pacific Communication*, 28(1), 61-82.
- Scherer, K. R., & Moors, A. (2019). The emotion process: Event appraisal and component differentiation. *Annual Review of Psychology*, 70, 719-745.
- Schwarz, U., Hoffmann, S., & Hutter, K. (2015). Do men and women laugh about different types of humor? A comparison of satire, sentimental comedy, and comic wit in print ads. *Journal of Current Issues and Research in Advertising*, 36(1), 70-87.
- Spielmann, N. (2014). How funny was that? Uncovering humor mechanisms. *European Journal of Marketing*, 48, 1892-1910.
- Vashisht, D., Royne, M. B., & Sreejesh, S. (2019). What we know and need to know about the gamification of advertising. *European Journal of Marketing*.
- Walter, N., Cody, M. J., Xu, L. Z., & Murphy, S. T. (2018). A priest, a rabbi, and a minister walk into a bar: A meta-analysis of humor effects on persuasion. *Human Communication Research*, 44(4), 343-373.
- Warren, C., Carter, E. P., & McGraw, A. P. (2019). Being funny is not enough: The influence of perceived humor and negative emotional reactions on brand attitudes. *International Journal of Advertising*, 1-21.
- Weinberger, M. G., Swani, K., Yoon, H. J., & Gulas, C. S. (2017). Understanding responses to comedic advertising aggression: The role of vividness and gender identity. *International Journal of Advertising*, 36(4), 562-587.
- Yoon, H. J. (2015). Humor effects in shame-inducing health issue advertising: The moderating effects of fear of negative evaluation. *Journal of Advertising*, 44(2), 126-139.

- Yoon, H. J. (2018). Creating the mood for humor: Arousal level priming in humor advertising. *Journal of Consumer Marketing*, Vol & pp??
- Yoon, H. J., & Tinkham, S. F. (2013). Humorous threat persuasion in advertising: The effects of humor, threat intensity, and issue involvement. *Journal of Advertising*, 42(1), 30-41.
- Zhang, Y. (1996). Responses to humorous advertising: The moderating effect of need for cognition. *Journal of Advertising*, 25(1), 15-32.
- Zhang, Y., & Zinkhan, G. M. (2006). Responses to humorous ads: Does audience involvement matter? *Journal of Advertising*, 35(4), 113-127.