Cognition and Emotion: Exploration on Consumers Response to Advertisement and Brand

(Kognisi dan Emosi: Penerokaan Tindak Balas Pengguna terhadap Pengiklanan dan Jenama)

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ABSTRACT

Cognition and emotion are known to be drivers of information and message processing, leading to attitude formation. This research hypothesises that emotion, specifically intense positive mood, would elicit better ad and brand evaluations. This paper examined the role of the Associative Network Theory of Memory and Emotion (ANTME) within the framework of the Elaboration Likelihood Model (ELM). Adopting experimental method, the results confirmed most of our hypotheses. In four experimental studies via the purposive sampling method, undergraduate students were invited to volunteer in the experiments (N = 389). Study 1 (n = 60) established ELM as a framework within the sampling frame. The results indicate that individuals' difference in the need for cognition (NFC) evaluate both ad and brand differently. In study 2 (n = 131), despite having elicited positive and negative mood valence, none of the moods successfully boost the evaluations of ads and brands for either low or high NFC individuals. In study 3 (n = 129), the results indicate that only intense positive mood successfully garner favourable brand evaluation. Lastly, in study 4 (n = 69), the results reveal that prior exposure to a humourous stimulus (i.e., comic strip) affects ad evaluation only. This research offers some theoretical contributions to the establishment of cognition as drivers to information processing and ELM attitude formation; and insights into consumers' cognitive-emotional attempts in response to advertising and brands which may become an input for advertisers, brand builders and marketing firms to design more innovative and impactful advertising campaigns for a sustainable IMC. Further, it could assist policymakers and regulators in improving the existing advertising guidelines and policies in Malaysia.

Keywords: ANTME; advertising attitude; brand attitude; ELM; emotion; mood valence; mood intensity; need for cognition

ABSTRAK

Kognitif dan emosi merupakan pemacu untuk memproses maklumat, yang membawa kepada pembentukan sikap. Penyelidikan ini membentuk hipotesis bahawa emosi, khususnya emosi positif yang kuat, akan menghasilkan penilaian iklan dan jenama yang lebih baik. Oleh demikian, kajian ini meneliti peranan Associative Network Theory of Memory and Emotion (ANTME) dalam kerangka Elaboration Likelihood Model (ELM). Dengan menggunakan kaedah eksperimen, hasil kajian ini mengesahkan sebahagian besar hipotesis. Dalam empat kajian eksperimen melalui kaedah persampelan bertujuan, pelajar sarjana dijemput untuk menjadi sukarelawan dalam eksperimen (N = 389). Kajian 1 (n = 60) menetapkan ELM sebagai kerangka dalam pensampelan. Hasilnya menunjukkan bahawa perbezaan individu dalam keperluan kognisi (NFC) menilai kedua-dua iklan dan jenama secara berbeza. Dalam kajian 2 (n = 131), walaupun mood positif dan negatif terhasil, tidak ada mood yang berjaya meningkatkan penilaian iklan dan jenama untuk individu NFC rendah atau tinggi. Dalam kajian 3 (n = 129), hasilnya menunjukkan bahawa hanya mood positif yang kuat yang berjaya memperoleh penilaian jenama yang baik. Terakhir, dalam kajian 4 (n = 69), hasil kajian menunjukkan bahawa pendedahan awal kepada rangsangan lawak jenaka (cth: jalur komik) hanya mempengaruhi penilaian iklan. Penyelidikan ini menawarkan beberapa sumbangan teori untuk pembentukan kognitif sebagai pemacu kepada pemprosesan maklumat dan pembentukan sikap ELM. Penemuan mengenai percubaan kognitif-emosi pengguna sebagai tindak balas kepada pengiklanan dan jenama boleh dijadikan kegunaan bagi syarikat pengiklan dan pemasaran, serta pembangun jenama untuk merancang kempen iklan yang lebih inovatif dan berdampak untuk IMC yang mampan. Selebihnya, kajian ini dapat membantu para regulasi dan pembuat polisi dalam penambahbaikan garis panduan dan dasar pengiklanan yang sedia ada di Malaysia.

Kata kunci: ANTME; emosi; ELM; sikap pengiklanan; sikap penjenamaan; mood; intensiti mood; keperluan untuk kognisi

INTRODUCTION

Brands use various contents, and ad appeals to promote their brands sustainably in the industry. In Western countries, brands usually adopt a more humorous and non-sensical approach to deliver their branded message in the mass media. In contrast, in most Asian countries, such as Malaysia, both rational and emotional appeals are used to brand the contents and messages (Maseeh et al. 2021). In this current study, we examined the role of both cognition and emotion in evaluating ads and brands. The formation of favourable ad and brand evaluations has always been a major concern of every brand managers and researchers in the field. A well-designed integrated marketing communications (IMC) campaign should generate favourable ad and brand evaluations which drive customer loyalty (Luxton et al. 2015). Our study investigates individual differences in cognition and emotion when evaluating ads and brands. Previous studies indicate that such evaluative behaviours are influenced by individuals' ability and motivation to process messages or information embedded in the ads (Ayob & Senik 2015; Eisend et al. 2019; Petty & Cacioppo 1986). In principle, individuals' processing of any ad message or ad is easily affected by their thought processes and emotional states (Gross & John 1997). There is a profound impact on individual differences when responding to ad message or stimuli (Yoon & La Ferle 2018). Specifically, individuals' cognitive ability and emotional state lead to unfavourable ad and brand evaluations (Crawford & Gregory 2015; Jurca & Madlberger 2015). Although ads can be entertaining and persuasive, ad audience' interpretations may at times hurt the brand's efforts to sustain in the market in the long run (Newton et al. 2016; Weinberger et al. 2017; Yoon 2015; Yoon & Tinkham 2013). Thus, the current study reasons that there is a need to empirically investigate the effects of need for cognition (NFC), intense mood valence, and perceived humour on consumers' attitudinal response to ad and brand (Alden et al. 2000; Eisend et al. 2019, 2018; Mulligan & Scherer 2012).

This study is based on the Elaboration Likelihood Model (ELM) and the Associative Network Theory of Memory and Emotion (ANTME). Specifically, our research investigates the effect of consumers' cognition and emotion on ad and brand evaluations to ensure long-lasting market sustainability of brands. Adopting ANTME theoretical paradigm allows this research to dissect the influence of humour, which led to a more favourable evaluation of brands and ads. Humour is a popular appeal in many integrated marketing communications (IMC) campaigns globally due to its impact on consumers' recall. Its mass media usage is pervasive; however, the adverse effects of a humour appeal when it is distastefully done. Overall, this study reveals that eliciting intense positive feelings before ad exposure (i.e., informative ad) can generate better ad and brand (depending on context).

Maintaining brand awareness and exposure would lead to a more assertive brand personality and equity creations through customers' trust and loyalty.

LITERATURE REVIEW

NFC AND ATTITUDE FORMATION IN THE ELM FRAMEWORK

Deriving from social psychology, social cognitive, or cognition is defined as the propensity of an individual to engage in effortful thinking and in processing information (Petty & Cacioppo 1984). This effortful thinking is also referred to as NFC. The need to cognitively process information, messages or tasks is characterised in the everyday life of an individual in achieving their goals; and this reflected through the elaboration likelihood model (ELM). The ELM argues that messages or information is processed through the central or the peripheral route of the elaboration continuum subjected to individuals' cognitive ability (Petty & Cacioppo 1986). In this sense, individuals with high NFC follow the central route to process the message, hence forming favourable brand attitude; as compared to individuals with low NFC who follow the peripheral route, thus forming favourable ad attitude or evaluation (Ayob & Dana 2017). Recent evidence on the use of ELM establishes that individuals with high NFC favour brand which provides detailed verbal/textual information; while individuals with low NFC favour ads with visual and audio information (Burton *et al.* 2019; Kim 2019; Kim & Kim 2018; Myers & Jung 2019; Vashisht et al. 2019). This finding is factual for individuals with high cognition needs who focus on message arguments' quality and prefer deep message processing. In contrast, those with low cognition need to emphasise the ad surface features or attractiveness, therefore requiring only superficial processing (Petty & Cacioppo 1986). Studies have also revealed that individuals with low NFC tend to favour advertising despite the intenseness of the message, so long the message is attractive in sound, visual and appeals (Eisend 2018; Spielmann 2014; Walter et al. 2018; Yoon & Tinkham 2013; Yoon 2015; Yoon 2018).

Nonetheless, the influence of different NFC levels on advertising and brand attitude in Malaysian consumers is still indefinite. Although ELM is valid in the Western consumer context, its effects are claimed as unsuitable for replication in other countries (Kitchen et al. 2014; Morris et al. 2005). In contrast, replication of ELM model in non-Western countries has been strongly claimed as possible (Kerr et al. 2010; Kerr et al. 2015). Due to the two-sided claims mentioned above, this study proposes that the ELM model may work in the Malaysian consumer context. Therefore, it is hypothesised that:

H_1 High NFC consumers evaluates A_{Brand} more favourably

MOOD VALENCE AND ATTITUDE FORMATION

The involvement of emotion in forming good evaluation of the advertising and brand can be assessed through mood that comprises a positive and negative valence (Batra & Ray 1986; Gross & John 1997; Holbrook & Batra 1987). Recently, the studies of moods in advertising advocates that positive moods that result from viewing advertisements with a happy message or content form positive brand attitude (Bakhtiyari et al. 2017; Choi et al. 2016; Cockrill & Parsonage 2016; Cohen 2014; Poels & Dewitte 2019); whereas negative moods from viewing a daunting advertising message or content form negative brand attitude (Hamelin et al. 2017; Kujur & Singh 2018; Lancellotti & Thomas 2018; Lewis et al. 2019). In essence, consumers with positive moods respond positively to advertising messages with attractive images and sources rather than word-based advertising (Nikolinakou & King 2018; Poels & Dewitte 2019; Raza et al. 2018). Concerning the level of thinking, messages or information presented can encourage people with both positive and negative moods into processing messages in the low and high thought process, hence forming favourable attitude outcome (Martin & Clore 2013). In this sense, negative mood followed the central route, while positive mood followed the peripheral route of the ELM. Nonetheless, moods are relatively unstable (Batra & Ray 1986; Gross & John 1997), and they are moulded following events or experiences (Batra & Ray 1986; Gross & John 1997; Holbrook & Batra 1984). Hence, this study believes that positive mood can transpire in the central and negative moods in the peripheral route to form good responses to advertising and brand attitudes. Therefore, it is hypothesised that:

H_{2a} High NFC consumers evaluates A_{Brand} more favourably when they are happy

H_{2b} High NFC consumers evaluates A_{Brand} less favourably when they are sad

INTENSE MOOD VALENCE AND ATTITUDE FORMATION

An extensive part of mood valence is the intensive of the mood being expressed. A positive mood valence elicits positive mood intensity such as excitement, arousal and laughter etc. (Craton et al. 2017; Sharman et al. 2019; Hadinejad et al. 2019; Hur et al. 2020). Conversely, a negative mood valence elicits negative mood intensity such as misery, crying, fear and annoyance, etc. (Hur et al. 2020; Kamins et al. 1991; Teng et al. 2019; Warren et al. 2019). The influence of negative events (e.g., discriminating and stereotyping women) in an advertisement has been found to lead to anger and annoyance, forming a negative response to the advertising and brand (Sharman et al. 2019). On the other hand, a positive vibe present in an advertisement (e.g., soothing musical advertisement) produces joy and laughter, which later help form positive evaluation of the advertising and brand (Craton et al. 2017).

The intensity of mood involves various separate psychological mechanisms of human emotion (Batra & Ray 1986). Hence, the elicitation of positive and negative mood intensity also depends on the level of NFC to form good advertising and brand attitude (Petty & Cacioppo 1986). In a nutshell, according to ELM, a negative mood occurs in the central route, and positive moods arise in the peripheral route (Petty & Cacioppo 1986). In this study, however, the author believes that the inconsistency of moods, that may have different effects when assessed earlier to viewing events and experiences (Batra & Ray 1986; Gross & John 1997; Holbrook & Batra 1984) can change the ypothesiz of moods in the elaborative routes. The author trusts that, positive mood intensity can occur in the central route, and negative mood intensity to occur in the peripheral route to form good attitude outcome. Therefore, this study hypothesized that:

H_{3a} High NFC consumers evaluates A_{Brand} more favourably when they are laughing

H_{3b} High NFC consumers evaluates A_{Brand} less favourably when they are crying

PERCEIVED HUMOUR AND ATTITUDE FORMATION

Perception of humour may shape both favourable and unfavourable response to advertising and brand. Positively perceived humour produced fondness on the advertising and brand (Eisend 2018; Yoon & Kim 2014; Weinberger et al. 2017). Humour advertising message that is apprehensible and low in its arousal (e.g., sentimental humour, comic wit etc.) is commonly perceived as humorous and entertaining, creating good advertising and brand attitude (Newton et al. 2016; Schwarz et al. 2015; Spielmann 2014). In contrast, past studies highlighted that negative humour message that is inappropriate, complex, and sensitive (e.g., gender stereotype, taboo themed, disparaging, threatening etc.) that perceived as not humorous, would lead to an unfavourable response to advertising and brand (Eisend et al. 2019; Lee et al. 2017). Furthermore, in term of level of thinking, individuals with low NFC are found to favour humorous advertising message more than those with higher NFC (Flaherty et al. 2004; Makienko 2014; Pelsmacker & Geuens 1999; Yoon & Kim 2014; Zhang et al. 2019), due to the attractiveness of the advertisement and the humour presented (Eisend 2018).

Perception of humour advertising message can produce differential and indefinite effects when being assessed on different individuals (Ruch 2001), and different level of cognition (Petty & Cacioppo 1986). Past studies only tested humour perceptions regarding humorous advertisement; however, it has not primed the humour to an informative ad. In this study, the author deems that humour perception can occur in non-humorous events or conditions (i.e., informative advertisement). Hence, the study proposes that humour perception can form a desirable response to the advertising and brand of an informative advertisement following the peripheral

and central route of the ELM. Therefore, it hypothesised that:

H$_4$ Low NFC concumers evaluates A$_{Ad}$ more favourably when they are primed with humour

METHODOLOGY

The research adopted a basic quantitative experimental design comparing between treatment conditions. The experimental steps include designing or adopting materials for the experiment, choosing participants, pre-testing the materials and measurement items. In this experiment, final year University students in the Klang Valley, varying from various Faculties volunteered in the experiments as participants. Through four main studies, the experiment adopted measures items such as need for cognition (NFC) from Cacioppo et al. (1984) at 7-point scale, with 18-items, cronbach's alpha of 0.94. Item for mood is adopted from Sar et al. (2011), with 2 items on a 7-point semantic differential scale, cronbach's alpha of 0.79. Perceived humour adopted from Zhang (1996) was measured with a semantic differential scale and with three pairs of bipolar adjectives, using a 7-point semantic differential scale, cronbach's alpha of 0.94. Item for advertising attitude was adopted from Aylesworth and MacKenzie (1998) with three items, using a 7-point semantic differential scale, which had a cronbach's alpha of 0.95. Finally, brand attitude was assessed using items from Bruner (1998) and is measured using a 7-point semantic differential scale, with cronbach alpha is 0.87

A total of 389 University students were randomly selected and placed into two different treatment conditions: low (vs. high) involvement product represented by detergent and car, which composes four different studies (refer Table 1). Several others 60 students participated in study 1, 131 students in study 2, another 129 students in study 3, and lastly about 69 students participated in study 4 of the experiment. These imbalences in the number of samples per group is considered valid in experimental research, as the treshhold 40 per group have higher valisity and reliability, and can be generalized (Vargas et al. 2017).

TABLE 1. Placement of participants per study and treatment conditions

TV Ad Type	Involvement Product	
	Low involvement (Detergent ads)	High involvement (Car ads)
Informative Ads	Study 1 – 4	Study 1 – 4

The two products (i.e., detergent and car) also represents video advertising adopted from the www.adsoftheworld.com that is also accessible in YouTube.

The products and advertisements were validated by expert panels and have gone through several pre-testing before proceeding with using them in the four studies. The pre-test results confirmed that participants were not familiar with the brand used in the ads of low involvement (*M*=3.37) and high involvement (*M*=3.44) conditions. Similarly, participants were well-versed in the English language used in the ads for both low involvement (*M*=5.25), and high involvement (*M*=6.33) condition. A manipulation tests on the NFC has also been done to check for the effectiveness of the independent variable induction, and this has also been met. These results suggest that the constructs and stimuli are non-bias, valid and reliable for use in all four studies. In the four main studies, a set of validated questionnaires was then given to the participants to be answered subsequent to viewing the informative advertisement. The questionnaire data were analysed using the statistical package for social sciences (SPSS) version 26. The main method to analyse the data includes the use of independent sample t-test and Univariate ANOVA refer Table 2). The table below illustrated the statistical analysis used.

RESULTS

All questionnaires from all the four studies were returned and analysed. There were no missing data, and the assumption for outliers, normality, validity and reliability for every item in all four studies have been examined and met. In answering the four studies' hypotheses, an independent sample t-test and one-way Anova was conducted to compare differences and see the interaction effects between the constructs in response to low and high involvement elaborative conditions.

STUDY 1

The purpose of study 1 is to form the notion of ELM in that individual with high (vs. low) need NFC will process message/information in the central (vs. peripheral) route. The ELM suggests that the amount of effort a person puts on his/her cognitive ability determines whether messages are processed through either route in ELM. Specifically, in this study, the author aimed to confirm that ELM can explain the difference in the formation of advertising and brand attitude (i.e., A$_{Ad}$ and A$_{Brand}$) in the Malaysian consumer context.

In regard to the effects of NFC on A$_{Brand}$, the author utilizes the GLM ANOVA. Firstly, the Levene's test is found to be insignificant (F(1, 58) = 1.81, p = .183), signifying that assumption of equal variances is met. Likewise, the normality assumption is also fulfilled with non-significant Kolmogorov-Smirnov test (p = .269). Correspondingly, the omnibus ANOVA showed that NFC significantly affect A$_{Brand}$ (F(1, 58) = 142, p < .001, ω^2 = .70, η^2p = .71). In other words, the t-test presented that participants who are prompted with high NFC condition

TABLE 2. Statistical analysis used in the research

| Classification	Statistical functions	Application
Data entry and cleaning	Reverse coding, outliers	Pre-tests
Descriptive analysis	Percentage/Frequency scores, central tendency (mean), dispersion (standard deviation)	Study 1 until 4
Normality analysis	Normality (Skewness and Kurtosis)	
Reliability analysis	Item-total correlation, Cronbach's alpha	
Validity	Discriminant validity	
Analysis of variance	Independent sample t-test, Univariate ANOVA	
Regression analysis	Hayes Process Macro, Johnson Neyman Floodlight technique	

($M = 6.42$, $SD = .44$) evaluate A_{Brand} more favourably than those in low NFC condition ($M = 4.89$, $SD = .55$) (refer Figure 1).

In regard to the effects of NFC on A_{Ad}, the author discovered that the Levene's test is significant ($F(1, 58) = 4.82$, $p = .032$), denoting that assumption of homogeneity of variance is not met. Nonetheless, Kolmogorov-Smirnov tests of normality was non-significant ($p = .901$). Consistently, the omnibus ANOVA showed that participants' NFC significantly affect A_{Ad} ($F(1, 58) = 113$, $p < .001$, $\omega^2 = .65$, $\eta^2 p = .66$). The t-test also showed that, participants with low NFC respond more favourably towards A_{Ad} ($M = 5.98$, $SD = .78$) compared to those of high NFC ($M = 3.17$, $SD = 1.22$) (refer Figure 2).

STUDY 2

The ELM and studies using ELM have focused on individuals' cognitive ability to process messages and form attitudes following the central and peripheral routes. However, the ELM has disregarded the influence of emotions in the message processing routes mainly in the central route (Kitchen et al. 2014; Morris et al. 2005; Petty & Brinol 2015; Schumann et al. 2012; Warren et al. 2018). Hence, the purpose of study 2 is to investigate the influence of NFC and prior mood valence (happy vs. sad) on A_{Ad} and A_{brand} of an informative advertisement.

Regarding the effects of NFC and mood valence on A_{Brand}, the result for Levene's homogeneity of variance assumption is met ($F(3, 127) = 1.30$, $p = .279$). Nonetheless, the Kolmogorov-Smirnov test reveals violation of normality assumptions ($p = .034$). Such violation is possible as ANOVA is robust against normality for a cell sample size of more than $n > 20$ (Kuiper & Hoijtink 2010; Mardia 1971). The omnibus ANOVA results indicate that the model is significant ($F(3, 127) = 70.30$, $p < .001$, $\eta^2 p = .62$, $\omega^2 = .61$). Nevertheless, there is no interaction effect of NFC and mood on A_{Brand} ($p = .558$). There is only a significant main effect of NFC ($F(1, 127) = 209.80$, $p < .001$, $\eta^2 p = .62$, $\omega^2 = .62$) and not mood ($p = .913$) (refer Figure 3). Simply put, whether we elicit a happy or sad mood before watching the advertisement, there is no difference in participants' evaluation of the brand. This result is not in line with what has been hypothesised, and therefore H_{2a} was not supported.
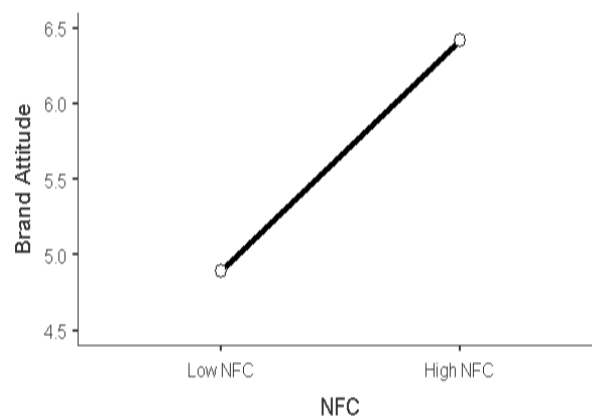
FIGURE 1. Effect of NFC on A_{Brand}
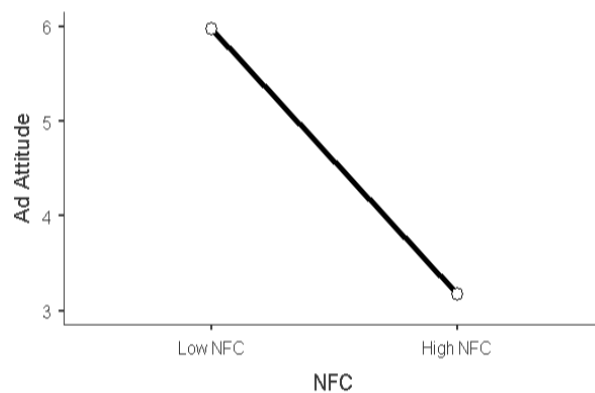
FIGURE 2. Effect of NFC on A_{Ad}

In regard to the effects of NFC and mood valence on A_{Ad}, the author found that the Levene's homogeneity of variance assumption is not met ($F(3, 127) = 9.78$, $p < .001$). The Kolmogorov-Smirnov test met the normality assumptions ($p = .098$). Consistently, the omnibus ANOVA results imply that the model is significant ($F(3, 127) = 123.80$, $p < .001$, $\eta^2 p = .75$, $\omega^2 = .74$). Hence, there is no significant interaction effect ($p = .491$). There is only significant main effect of NFC on A_{Ad} ($F(1, 127) = 369.35$, $p < .001$, $\eta^2 p = .74$, $\omega^2 = .74$) (Figure 4). Eliciting happy or sad moods prior to watching the advertisement, also made no difference in participants' evaluation of the
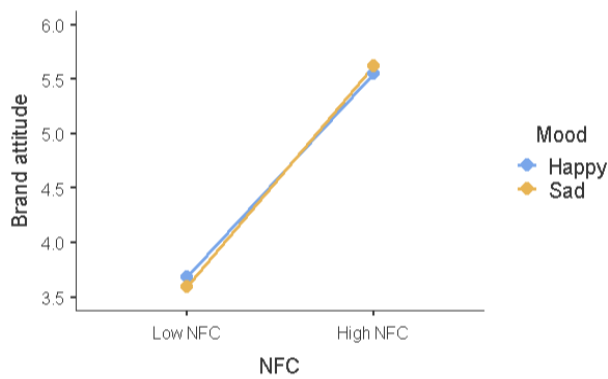
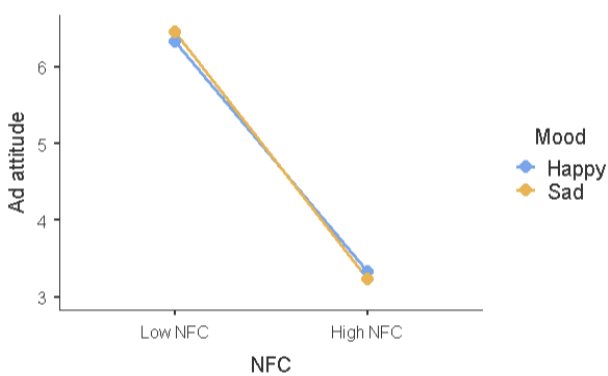FIGURE 3. Effects of NFC and mood on A$_{Brand}$

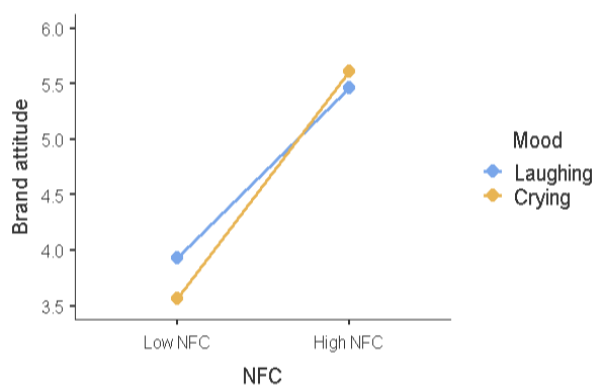FIGURE 4. Effects of NFC and mood on A$_{Ad}$

FIGURE 5. Effects of NFC and mood on A$_{Brand}$

advertising. This result is also not in line with what has been hypothesized, and thus H$_{2b}$ was not supported.

In summary, the study discovered that mood valence (i.e., happy and sad) did not influence an individual's level of thinking in forming desirable attitude advertising and brand. This is perhaps because the mood is an unstable emotional condition; and that prior mood experienced before engaging in an event (i.e., feeling happy or sad before watching an informative advertisement) may render the mood effect after watching the ad insufficiently

(Petty & Brinol 2015; Warren et al. 2018), thus making the interaction effects irrelevant.

STUDY 3

Since mood valence is found not to affect the evaluation of advertising and brand in study 2, the author extended mood assessment to engage a more intensified mood valence. Therefore, the purpose of study 3 is to investigate the influence of NFC and prior mood intensity (i.e., laughing vs. crying) on A$_{Ad}$ and A$_{brand}$ of an informative advertisement.

In regard to the effects of NFC and mood valence on A$_{Brand}$. The Levene's homogeneity of variance assumption is met ($F(3, 125) = 1.30$, $p = .157$), reinforced by nonsignificant Kolmogorov-Smirnov ($p = .168$). The omnibus ANOVA results imply that the model is significant ($F(3, 125) = 69.10$, $p < .001$, $\eta^2p = .62$, $\omega^2 = .61$). Notably, there is significant interaction effect of NFC and mood intensity on A$_{Brand}$ ($F(1, 125) = 2.12$, $p = .044$, $\eta^2p = .03$, $\omega^2 = .01$) supported only by significant main effect of NFC ($F(1, 125) = 200.89$, $p < .001$, $\eta^2p = .62$, $\omega^2 = .60$) and not mood ($p = .380$). The results of the simple effect analyses for the 2-way interaction effect reveal that participants with low NFC evaluate A$_{Brand}$ more favourably when they are showed to laughing face ($M = 3.93$, $SD = .77$) compared to when they are showed to crying face ($M = 3.57$, $SD = .80$, $t(125) = 2.04$, $p = .043$). However, there is no significant different ($p = .410$) for individuals with high NFC when they are showed either laughing or crying faces (refer Figure 5). Though the results are not fully supportive of the hypothesis, the interaction effects showed that the H$_{3a}$ was partially supported.

In regard to the effects of NFC and mood valence on A$_{Ad}$. The Levene's homogeneity of variance assumption is not met ($F(3, 125) = 10.20$, $p < .001$). The Kolmogorov-Smirnov test of normality was non-significant ($p = .168$). Particularly, the omnibus ANOVA results denote that the model is significant ($F(3, 125) = 130.67$, $p < .001$, $\eta^2p = .76$, $\omega^2 = .75$). The interaction effect of NFC and mood intensity on A$_{Ad}$ is not significant ($p = .558$) supported only by significant main effect of NFC ($F(1, 125) = 391.34$, $p < .001$, $\eta^2p = .76$, $\omega^2 = .75$) and not mood ($p = .691$) (refer Figure 6). Simply, the result implies that, whether the author elicit laughing or crying faces prior to viewing the informative advertisement, there is no different in participants' response to advertising attitude. The result is not in line with the hypothesis, therefore, H$_{3b}$ was not supported.

In summary, though emotion is said to have the potential to process a message in the two routes especially the central route (Kitchen et al. 2014; Morris et al. 2005; Petty & Brinol 2015; Schumann et al. 2012; Warren et al. 2018), the results from study 3 only partially support such claims. Nevertheless, the study discovered that positive, intense mood valence such as laughter compared to crying influenced individuals with a low level of thinking in forming favourable responses on brand better.
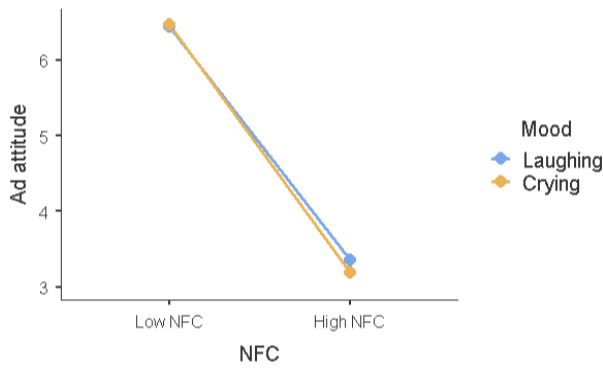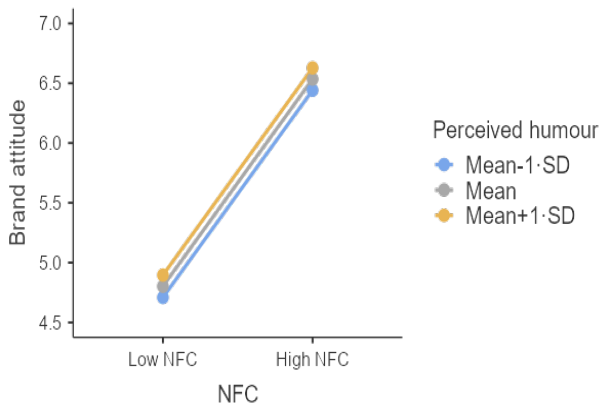
FIGURE 6. Effects of NFC and mood on A_{Ad}

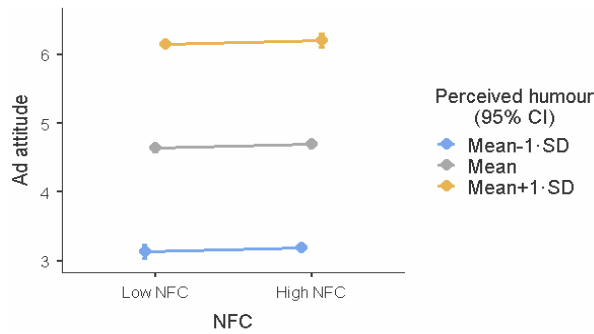FIGURE 7. Effects of NFC on A_{Brand} controlling for perceived humour

FIGURE 8. Effects of NFC on A_{Ad} controlling for perceived humour

STUDY 4

The results from study 3 highlighted that only positive mood intensity (i.e., laughing) could significantly form favourable response to A_{Brand} for individuals with low NFC. Therefore, in study 4, the author engaged the intense positive mood by assessing perceived humour. Hence, the purpose of study 4 is to investigate the influence of NFC and prior perceived humour on A_{Ad} and A_{Brand} of an informative advertisement.

Firstly, in analysing the result, this study used the GLM ANCOVA of NFC on A_{Brand} controlling for perceived humour (i.e., perceived humour as a covariate) by showing humorous comic strip participants before watching the informative advertisement. The homogeneity of regression slopes suggests that perceived humour does not differ between low and high NFC conditions ($F (1, 65) = .03, p = .872$), which simply means that perceived humour is acceptable as a covariate in the tested model. The Levene's test of homogeneity showed that the assumption is met ($F (1, 67) = 3.88, p = .05$), reinforced with nonsignificant Kolmogorov-Smirnov ($p = .693$). The omnibus ANCOVA suggests that the model is significant ($F (2, 66) = 89.20, p < .001, \eta^2 p = .73, \omega^2 = .72$). The result showed that perceived humour as a covariate is nonsignificant ($p = .411$). However, the results further specify that after controlling for perceived humour, there is main effect of NFC on A_{Brand} ($F (1, 66) = 59.86, p < .001, \eta^2 p = .48, \omega^2 = .24$) (refer Figure 7).

The GLM ANCOVA of NFC on A_{Ad} controlling for perceived humour showed that homogeneity of regression slopes for perceived humour does not differ between low and high NFC conditions ($F (1, 65) = .11, p = .747$), where the perceived humour is plausible as covariate in the model. The Levene's test of homogeneity assumption is also met ($F (1, 67) = 1.05, p = .317$), with a significant normality of the Kolmogorov-Smirnov ($p < .001$). The omnibus ANCOVA showed that the model is significant ($F (2, 66) = 6515.09, p < .001, \eta^2 p = .99, \omega^2 = .99$). The results revealed that when evaluating for A_{Ad}, individuals' NFC does not influence A_{Ad} ($p = .247$). The result concludes that, with increase in perceived humour, both individuals with low and high NFC increases in their evaluation of the informative advertisement ($F (1, 66) = 3747.97, p < .001, \eta^2 p = .98, \omega^2 = .29$) (refer Figure 8).

In summary, the results from study 4 emphasised that perceived humour has different effects on the central and peripheral routes of ELM. When primed with humour (i.e., comic strip) before watching the low informative advertising (i.e., detergent ad), both participants in the low and high NFC conditions do not change in their response to advertising. In other words, an increase or decrease in perceived humour does not influence participants' level of thinking. However, when primed with humour (i.e., comic strip) before watching the high informative advertising (i.e., car ad), participants in the low NFC condition respond favourably to brand thus following the central route of the ELM message processing. The result is partially in line with what has been hypothesised, and therefore H$_4$ is partly supported.

DISCUSSIONS AND MANAGERIAL IMPLICATIONS

This research provides further evidence of the importance of individuals' emotions (i.e., intense mood valence and perception to humour) as drivers for message processing in the ELM to enhance the formation of attitude

outcomes. In summary, as mentioned above, the results from study 1 confirm the hypothesis that when cued with a car in the high informative advertisement, individuals will process the message following the central route of the elaboration likelihood model (ELM), thus enhancing brand evaluations. On the other hand, when cued with detergent in the low informative advertisement, the message is processed in the peripheral route of the ELM; thus, enhancing the evaluation is for advertising more. This argument, therefore, proves and supports hypothesis 1. Conclusively, study 1 alligns the notion of the ELM in which those responding favourably to brand are those with high cognitive ability thus following the central route of the message processing theory (ELM). On the other hand, those who favour only the advertising are those with low cognitive ability where they focus more on the attractiveness of the advertising (i.e., colour, movements, design etc.); hence, processing message in the peripheral route of the ELM. This outcome is also in line with the outcome from Burton et al. (2019) and Kim (2019).

On the other hand, study 2 depicted that mood does occur in the associative network theory of memory and emotion (ANTME) but does not fit with the notion of the ELM either through the central or peripheral route of the message processing. This simply means that simple moods effect such as happy or sad on advertising or brand does not influence ones thinking ability as claimed in the theory. This outcome is also in line with the claim made by Kim and Kim (2018) and Myers and Jung (2019).

Notably, the result in study 3 concluded that individuals with low thinking ability, when primed with laughter, responded more favourably on the high informative advertisement (i.e., car ad), thus following the central route ELM. This finding controverts the notion of ELM by showing that low elaborators can also engage message processing in the central route. It is primarily supported by ANTME, where positive emotions or moods (i.e., laughter) inhibited in individuals' minds are also influenced by the surrounding events and the mind itself to form attitudes (Bower 1981; Blaney 1986). Overwhelmingly, study 3 shows that moods that are more expressive or intense such as laughing and crying which occur in the ANTME co-exist on the ELM framework. This illustrated that participants that are laughing responded favourably to brand are those with high cognitive ability thus following the central route of the message processing theory (ELM). On the other hand, those who cried are those with low cognitive ability where they focus more on the attractiveness of the advertising (i.e., colour, movements, design etc.); hence, processing message in the peripheral route of the ELM. This result overrules the claims made by Myers and Jung, (2019) and Vashisht et al. (2019) in those emotions such as mood cannot occur in the ELM framework.

Furthermore, study 4 also confirmed that when primed with humour contents (i.e., comic strip) before watching the informative advertisement, those with high thinking condition responded favourably on the brand. This result refutes the claim that elements of humour cannot influence those with high cognition in the evaluation of brand (Burton et al. 2019; Eisend 2018; Furnham 2019; Kim 2019; Kim & Kim 2018; Myers & Jung 2019; Spielmann 2014; Vashisht et al. 2019; Walter et al. 2018; Yoon & Tinkham 2013; Yoon 2015, 2018). Given the above findings, this research confirms that message processing involves individuals' cognition and emotion in influencing good evaluations of advertising and brand in the long run. Conclusively, study 4 alligns the notion of the ELM in which those who are exposed to a comic strip piror watching the car advertisement responded favourably to brand making them high in their cognitive ability thus following the central route of the message processing theory (ELM). Furthermore, those who are exposed to a comic strip prior watching the detergent advertisement favoured only the advertising; hence making them low in their cognitive ability as they focus more on the attractiveness of the advertising (i.e., colour, movements, design etc.); hence, following the peripheral route of the ELM. This concludes that comical humour that is a form of mood existing in the ANTME also co-occur in the ELM framework of message processing; hence overruling the claim by Myers and Jung (2019) and Vashisht et al. (2019) where moods related elements such as humour cannot occur in the ELM framework.

CONCLUSIONS

As a conclusion, the study findings may serve as a reference for advertising firms to strategise new ways to promote brands, enhancing brand personality and develop good advertising for brand building. Advertising firms and content creators who want to use moods such as laughter in the form of comical forms in their campaigns may help them to strengthen their SWOT analysis and amplify their Porter's competitive documents. Adopting a sense of laughter as mood creation in various advertising mediums including the TV ads has found to elicit different thoughts and feelings among viewers who are consumers. Therefore, this corroborates the importance of viewers' responses towards advertising and brands. Failing to do so, as suggested by Li et al. (2019) may lead to loathing of the advertising and brands by consumers. The findings are also supporting building consumer trust and loyalty and planning the correct market positioning; ultimately, all these efforts merged to support brand sustainability amidst the market environment's uncertainty (Senik et al. 2014). The insights of consumers' cognitive-emotional attempt in response to an evaluation of advertising and brand may assist policymakers such as Malaysia Advertising Policy (MAP), and regulators such as the Advertising Standards Advisory (ASA) to refurbish existing policies on advertising in Malaysia that would benefit advertising bodies, advertisers and consumers in a more extended

period. This research is, however, focused only on informative advertising to assess consumer's cognitive-emotional attempt. Future research should consider expanding the scope into engaging various advertising appeals, such as fear, emotional, or even humorous, still under investigation in Malaysia.

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