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# The influence of emotional confidence on brand attitude: using brand belief as mediating variable

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## ABSTRACT

The direct influence of emotional responses on thinking is firmly established in the literature. The assumption that emotion has primacy over cognition challenges conventional wisdom that both attitude and confidence are primarily cognitive in nature. In order to examine this particular assumption, an alternative conceptualisation has been introduced, called 'emotional confidence' (EC). This study is the first attempt to measure EC as a separate construct and to test whether EC can be a determinant of brand attitude (BA) and this relationship can be mediated by brand beliefs. The data was collected from Swansea University Students in context of car buying (N = 197) and analysed through Structural Equation Modelling (SEM). The results indicated that EC can be primary determinant of BA and the relationship between the two is mediated by brand beliefs. Theoretical and managerial implications of the findings are discussed in the light of the study's limitations and areas for further research indicated.

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Emotional confidence (EC); brand attitude (BA); brand beliefs; emotions; cognition

## JEL CLASSIFICATIONS

M3; M30; M31; M39

## 1. Introduction

Attitude as a construct is believed to be a key to predict behaviour in general and more specifically, buying behaviour in particular. The concept of attitude has received more attention than any other construct in academic literature (e.g., Ajzen, 1988; Bagozzi, Tybout, Craig, & Sternthal, 1979; Batra & Ahtola, 1991; Thurstone, 1931; Allport, 1957; Eagly, Mladinic, & Otto, 1992; Spears & Singh, 2004). There is a strong assumption that attitude is a sufficient precondition for behaviour. However, some evidence suggests (see Wicker, 1969) that attitude does not always predict behaviour with accuracy, thus it is not the sufficient precondition for behaviour. This inconsistency casts doubt on nature of the attitude the way it influences other constructs, so it is essential to understand how attitudes are formed. More specifically, how brand attitudes (BA) are formed.

The attitude theory suggests that attitudes are mainly influenced by beliefs (See Fishbein & Ajzen, 1975). Petty, Briñol, and Tormala (2002) state that the strength of a belief influences

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attitudes. Similarly Mitchell and Olson (1981) state that brand beliefs influence BAs. A brand belief can be defined as consumers' perception about outcomes of the brand, for instance fuel efficiency and safety could be a brand belief for a particular make of car (Lutz, 1975). It is also suggested that the relationship between brand beliefs and BA is mediated by brand belief strength (Olson & Dover, 1976). So, the influence of brand beliefs on BA is investigated either as a direct influence of brand attribute beliefs on BA, or this relationship is mediated by belief strength. The strength of an attitude is also defined as attitude confidence (Berger & Mitchell, 1989). It is essential to note that attitude confidence is used as a mediating variable rather than as an independent construct.

The relationship between brand belief and BA is high on cognition and similar is the case when we use confidence as dimension of an attitude (i.e., how confident you are about an attitude). Mitchell and Olson (1981) explored alternative possibilities. For instance, they argued that repeated advertising exposures of a fictitious can form attitude towards a brand without necessarily forming beliefs about that brand. It is also empirically tested that preference towards an object can be formed without forming beliefs about that object.

The formation of BAs based on brand beliefs involve cold affective responses rather than hot emotional laden responses (Fedorikhin, Park, & Thomson, 2008). A person can develop a positive attitude towards an object, but it is not necessarily the case that it is based on strong positive feelings. It can be based on cold attribute evaluation. For instance, in the context of car-buying, the fuel efficiency of a vehicle can form a positive attitude towards the vehicle (Thomson, MacInnis, & Park, 2005). Whereas, the emotional confidence (EC) involves a hot emotional response, specifically when it is not used as a dimension of an attitude; strong elicited feelings towards an object over time can lead to affective certainty (i.e. EC). For instance, elicitation of feelings towards a car by looking at its colour or shape and such feelings persist over period of time, as a result one can feel affective certainty towards the car, such feelings are not necessarily the result of any specific attribute evaluation.

The basic premise of this article is that confidence is based on emotion (i.e., EC) and is not a dimension of attitude; rather, it is a separate construct which influences an attitude (e.g., BA) and this relationship, in light of the complex nature of emotion and cognition, can be mediated by belief (e.g., brand belief). The nature of both emotion and cognition is complex because it is bidirectional, which means that emotions can influence cognition and vice versa (Izard, 2007). EC is defined as a certainty based on feelings. Until now, no academic research study has empirically demonstrated that EC can be a determinant of BA and that brand beliefs can be a mediating variable rather than a main determinant of BA. Thus, this article attempts to affirm that EC can be a determinant of BA and that this relationship can be mediated by brand beliefs. In this study, EC, BA, and brand beliefs are measured in the context of purchasing a car.

## 2. Literature review

Fishbein and Ajzen (1975) describe attitude as evaluative beliefs. Abelson, Kinder, Peters, and Fiske (1982) argue that affective and evaluative responses should not be used interchangeably because evaluation is a result of a semantic differential that differs from affective response in terms of evaluative judgement and motivation; former is mainly based on judgemental response and later is mainly based on motivational response. The judgemental responses are normally postulated by contemporary psychologists as being the result of

predominant cognitive processing. There are differences between affective and cognitive judgements: cognitive judgements evaluate what is in the stimulus (e.g., white colour), whereas affective judgements involve the self in that stimulus (e.g., I like the white colour) or add ideal preferences to it (e.g., the white colour is cool) (Zajonc & Markus, 1982). In some cases, we are likely to make a decision without processing any information; this might be initiated by an affective reaction toward stimuli. On many occasions, showing a preference for X over Y is nothing more than an instance of 'one likes X'; any information collected about X or alternates of X is used as justification, rather than being used for decision-making (Zajonc, 1980, 1984). For instance, if one likes a car, assuming that is mainly based on an affective response, and buys it, it is likely that one may collect information about its attributes to rationalise his or her decision.

It is not easy to determine the primacy of affect or cognition in a decision-making process, so it is difficult to assess if a decision is led by an affective response or a rational response, based on attribute information about a product. It is therefore essential to understand whether a preference is the result of simply liking something (affective) or the result of specific information processing (evaluative, i.e., based on information). Likewise, diverse and often confusing explanations of confidence hinder our ability to assess its influence on other constructs, such as brand beliefs and BAs. In the literature, confidence is most often used to mean 'confidence in an object,' such as confidence in ability, thought, and judgement. In this way confidence is an example of metacognition (i.e., an assessment of one's own thoughts). Kleitman and Stankov (2007) describe metacognition as an awareness of a cognitive process, meaning that it is an assessment of one's own abilities and knowledge and it is also an essential part of information processing. Confidence in one's own ability or judgement is said to reflect the self-monitoring process of metacognition (Kleitman & Stankov, 2007). Petty et al. (2002) concluded that metacognition plays an important role in persuasion and in attitude change. They discuss the fact that people with a higher level of confidence in their thoughts report higher certainty and confidence in their attitudes toward certain objects.

It is also essential to understand that if confidence construct, is considered an evaluative component or a non-evaluative component. Berger and Mitchell (1989) discusses that in the literature related to influences of attitude on behaviour, it is implicitly assumed that a change in behaviour is not possible without first changing one's attitude. This assumption completely ignores the possibility that a change in behaviour can take place independent of a person's evaluation of a situation, e.g., via other non-evaluative components such as attitude accessibility and attitude confidence. Fazio and Zanna (1981) view attitudes as multi-dimensional, consisting of both evaluative and other non-evaluative dimensions, such as attitude accessibility or attitude confidence. Berger and Mitchell (1989) argue that repeated exposure can also influence non-evaluative components of attitude; specifically, such exposure may increase attitude confidence. They reason that the high elaboration of information which results from the repetition of advertisements may increase attitude confidence. The high elaboration of information refers to rich content of a brand that is readily accessible at the time of purchase. If repetitive exposure can increase attitude confidence, then it suggests that there is a strong possibility that confidence can be increased through non-evaluative affective responses over a period of time. For instance, in the context of the influence of advertising on attitudes towards a brand, Berger and Mitchell (1989) concluded that repetitive advertising exposures increase accessibility of a brand from memory and

confidence (e.g., attitude confidence). Research also indicates that non-evaluative components can moderate attitude–behaviour relationship (Fazio & Williams, 1986, cited in Berger & Mitchell, 1989). In this case, attitude confidence is considered to be a non-evaluative component that is susceptible to advertising, which may moderate the relationship between attitude and behaviour (Berger & Mitchell, 1989). In addition to this, being a non-evaluative component of an attitude, confidence is also described as feeling based response (Barbalet, 2001). Compte and Postlewaite (2004) states that emotions can influence confidence and can be used as an independent construct based on feelings, rather than an attitude component.

Furthermore, in the literature (behavioural and management sciences), EC is rarely mentioned as an independent construct. Possible antecedents and outcomes of EC are yet to be documented in specific detail in the academic literature. However, Kidwell, Hardesty, and Childers (2008) highlight the role of EC, in context of buying of obese consumers and their decisions to buy healthy (low and high calories food) food. They postulate that consumers' calibration between EC and emotional intelligence lead to a quality decision, the calibration reflects when one is high on emotional intelligence and confidence. The quality decision was measured as choice of a food containing low calories by resisting temptation of high calories. The consumer calibration is defined as: 'consumers who are emotionally calibrated not only possess a high level of emotional ability but also are confident in their feelings of self-assurance and conviction' (Kidwell et al., 2008, p. 613).

Despite coining the term EC, it is measured and used as a cognitive construct. For example, EC was measured in a metacognitive way, such that one can be said to be certain about one's emotional intelligence. Responding to certainty about one's intelligence implicates it as a cognitive construct (i.e. metacognitive in nature). Therefore, it is essential to understand how EC can be used as an independent construct that is not measured by a single metacognitive item. Gross, Brewer, and Aday (2009) stated that positive emotions such as pride and hope influence confidence and that there is a reciprocal relationship between confidence and hope. In order to explain the conceptual domain of EC, it is measured as a consequence of emotional responses. Thus, EC can be defined as a certainty based on an emotional response toward an object. It is essential to note that, since the acquired certainty is based on feelings, initial formation of EC requires little or no cognition. It is affirmed by neuropsychological study (see LeDoux, Farb, & Ruggiero, 1990) that affective responses can occur without cognitive processing. However, recall of feeling certain towards an object may involve cognition and that is consistent with bidirectional nature of emotion and cognition. Before introducing a conceptual model and hypothesis, it is important to highlight why we need to reassess the predominant cognitive nature of the constructs. The cognitive appraisal theorists argue that cognitive appraisal is a necessary condition for an emotion to elicit (no appraisal no emotion elicitation) (Lazarus, 1991). Whereas Zajonc (1980) empirical found that cognitive appraisal is not necessary condition.

The neuropsychological research findings support the partial independence of affect and cognition, indicating that physiological responses to emotional stimuli can be produced via a direct neural pathway that bypasses the prefrontal-cortex. This essentially means that affective responses can occur with little or no cognitive processing (LeDoux et al., 1990). Similarly, Zajonc (1980) states that affect and cognition are separate and partially independent systems and that although they function conjointly, affect could be generated without a prior cognitive process. On the other hand, Lazarus (1982) postulates that some cognitive processing is an essential prerequisite for an affective reaction. This processing is known

as cognitive appraisal and it is an integral feature of all emotional states. Thus, cognitive appraisal is considered as a necessary condition for emotional elicitation (Lazarus, 1991). Whether or not cognitive appraisal is a necessary condition for emotion depends upon the premises on which the conclusion is drawn. For example, according to Zajonc (1980), cognitive appraisal implies deliberate reflection, rationality, and awareness. Based on this premise, he argues that in a rabbit's confrontation with a snake, the rabbit has no time to consider all possible propositions to gauge the likelihood of attack; hence, escape takes place long before a cognitive process can occur. On the other hand, Lazarus (1982) considers the implied deliberate reflection, rationality, and awareness of cognitive appraisal to be a misconception. Based on this premise, he argues that the quick flight of the rabbit in this scenario is due to a cognitive schema that is formed by neural inheritance and experience (see also Fox, 2008).

The necessity of cognitive appraisal for eliciting an emotional response eliminates the possibility of having an emotional response as a primary response toward an object. Thus, BAs and emotional responses are post-cognitive. Presumably, that is the reason the constructs of BA and confidence are predominantly conceptualised as cognitive constructs. On the other hand, the necessity of cognitive appraisal is empirically falsified (see Zajonc, 1980, 1984), thus presenting the possibility that an emotional response can be a primary response. In light of this possibility, it is essential to reassess the relationships between variables, if EC can be used as a primary predictor (independent variable) rather than a secondary variable (dependent variable, as consequent of cognition).

### 3. Conceptual model and hypotheses

The direct influence of emotional responses on thinking is now firmly established in behavioural sciences literature (Clore & Gasper, 2000; Frijda & Mesquita, 2000; Zajonc, 1984). The role of emotions in forming beliefs and judgements is discussed by Frijda and Mesquita (2000), who argues that it is virtually impossible to alter beliefs and bring about modified information, since beliefs based on emotion are almost impossible to change by arguments, no matter how articulate and convincing the arguments may be. In addition to emotions shaping beliefs and making them resistant to change (Frijda & Mesquita, 2000), beliefs are adjusted to be compatible with internal evidence in the form of feelings (Clore & Gasper, 2000). Schwarz and Clore (1983) argue that feelings can be used as information, so in the case of moods and emotions, people may use their affective responses while forming an evaluative judgement. Such affective responses can directly influence attitudes (Zajonc & Markus, 1982). Affect as a distinct component of the structure of attitude is assumed to have primacy in responses towards an attitude objects (Haddock & Huskinson, 2004). According to the affective primacy hypothesis, emotional associations with an attitude object are activated more rapidly than are non-emotional (i.e., cognitive) associations. Affective responses transform into certainty (Gross et al., 2009) and this certainty, which is a consequence of emotional response, can precede other conventional determinants of attitude (Zajonc, 1984). Similarly, emotional responses can lead to positive BAs (Thomson et al., 2005). Thus, it can be hypothesised that EC can determine BA:

**H<sub>1</sub>:** EC will have a positive influence on BA.

The main goal of this article is to prove that EC is one of the determinants of BA. There is ample evidence in behavioural sciences academic literature indicating that attitude influences both behavioural intentions and buying behaviour (Ajzen, 1988; Fishbein & Ajzen, 1975; Sheppard, Jon, & Warshaw, 1988). The influences of EC on BA can enrich our understanding if it can be used as a primary influencing factor on BAs; however, it can also be criticised for not taking into account the role of cognition when assessing direct influences of EC on BAs. Basic emotional responses, also known as core affect, are capable of influencing cognition, which, in turn, facilitates the formation of more emotional schemas. In this context emotional schemas are referred to as primary EC responses mediated by brand beliefs. As proponents of the view that cognitive appraisal is a necessary condition for emotions acknowledge that the functional relationship between emotional responses and beliefs can be bidirectional (e.g., Lazarus, 1991). Thus, it is hypothesised that:

**H<sub>2</sub>:** Brand beliefs will mediate the relationship between EC and BA.

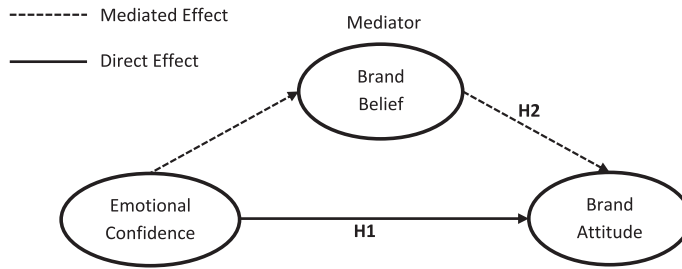
#### 4. Method

Since the data for the model were collected in the context of purchasing a car, a pilot study was conducted to see if the wording of the questions was clear and appropriate for capturing emotional responses within the context of a car purchase. As a result of the pilot study, the items were reworded; however, the rewordings were very minor.

The data were collected from post-graduate students of the School of Management, Swansea University, UK by distributing a self-administered questionnaire in the context of purchasing a car. In the beginning of the questionnaire, a filter question was included in order to identify the respondents who have purchased a car before. Only respondents who have purchased a car before were permitted to fill the rest of the questionnaire. It was a convenience sample: in total, there were 197 students in the sample. As the questionnaire was fairly short, the response rate was 100% (with no missing values). The students were approached at the start of the class, and their responses were collected as soon as they completed the questionnaire. Although there have been concerns over student sampling in terms of results generalisation (Sears, 1986), it is also argued that there is insufficient evidence to suggest that student sampling limits the ability of a study to generalise (Bernstein, Hakel, & Harlan, 1975). Similarly, there is no consensus regarding the adequacy of a sample size; the general suggestion is 10 respondents to one question (MacCallum, Widaman, Zhang, & Hong, 1999). So the sample size was in line to the suggestion.

#### 5. Measures

EC was measured using the Emotional Confidence Scale (ECS), four-item Likert scale in which 1 = 'strongly disagree' and 7 = 'strongly agree' the four items were as follows: 'Strong positive feelings play an essential role while buying a car'; 'When I have strong positive feelings about a car, then it is easier to decide'; 'My strong positive feelings towards a car gives me certainty to buy it'; and 'I rely on my strong positive feelings while buying a car'. Brand beliefs were also measured using a four-item Likert scale in which 1 = 'strongly disagree' and 7 = 'strongly agree'. The four items were as follows: 'It is very smooth even at higher speeds'; 'It is very comfortable to drive'; 'It is a high value car'; and 'It is excellent in



**Figure 1.** The conceptual model and hypothesised path. Source: Authors.

terms of safety,' BA was measured by a five-item semantic differential scale (Batra & Ahtola, 1991). The specific attitudinal items were selected while keeping in mind the relevance of the context (i.e., purchasing a car). The items were as follows: 'Useless–Useful'; 'Worthless–Valuable'; 'Bad–Good'; 'Not Efficient–Efficient'; 'Not Functional–Functional'. The items of the construct were subject to a confirmatory factor analysis. In addition, reliability and convergent validity were assessed using Cronbach's Alpha and average variance extracted (AVE), respectively. Figure 1 shows the conceptual model and hypothesised path.

## 6. Data analysis

A two-step approach that included confirmatory factor analysis (CFA) and Structural Equation Modelling (SEM) was used in this study (Anderson, Gerbing, & Hunter, 1987). CFA is used to assess the overall measurement quality and employed SEM through AMOS 21 for testing the proposed hypotheses (Jöreskog & Sörbom, 1996). The CFA was conducted using measurement models of the constructs. Figure 2 shows the measurement model graphics.

The maximum likelihood estimation was employed to examine the validity and reliability of the constructs. The goodness of the fit statistics suggests that the hypothesised model fits the data very well:  $\chi^2(62, 197) = 122, p < 0.001$ , the  $df = 1.9$ ; thus, the value is within the recommended threshold (1–3), thereby reflecting the model's fitness. All other model fitness indices were within the suggested thresholds of the model's fitness: GFI = .91; CFI = .96; SRMR = .05; TLI = .95; and RMSEA = .07, thus suggesting that the hypothesised model  $\Sigma(\theta)$  represents the population  $\Sigma$  and that there is less discrepancy between the sample covariance matrix  $S$  and the population covariance matrix  $\Sigma(\theta)$  than implied by the hypothesised model. There was no need to add any path in the hypothesised model for further fitting of the model. Table 1 shows all construct items, standard factor loading, and multi-item reliability. The composite reliability score of each construct indicates that all constructs are reliable ( $> .70$ ). The AVE of all scales is greater than .50, thus all scales are showing convergent validity. Similarly, the AVE of each construct is greater than their average correlation squared, thus showing discriminant validity.

## 7. Structural equation modelling – overall model fit

The structural model employing maximum likelihood estimation was used to assess the hypothetical relationship. The hypothesised relationship related to  $H_1$  is supported: the



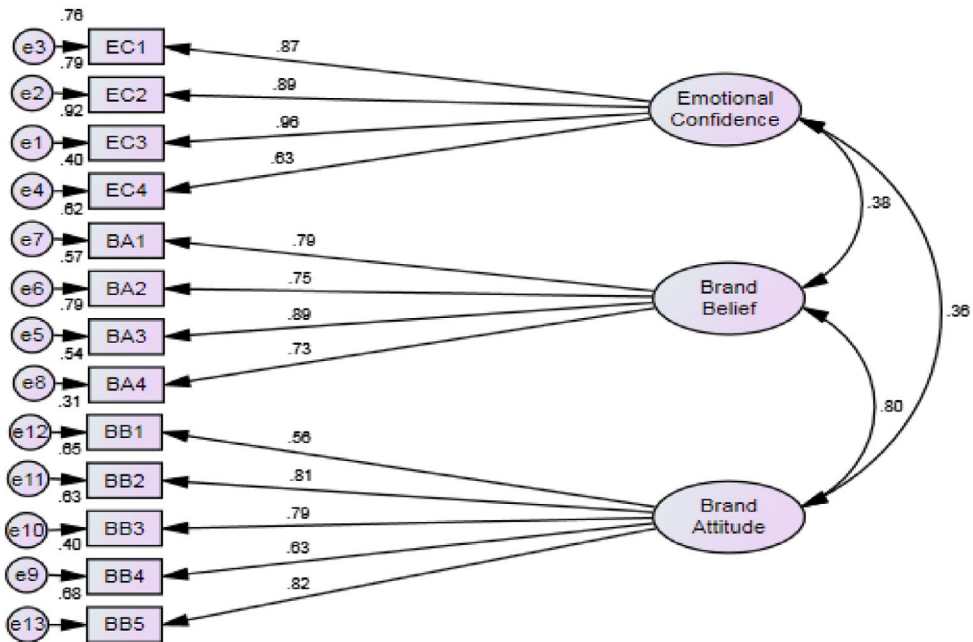


Figure 2. Measurement model. Source: Authors.

Table 1. Summarised results of standardised factor loadings, composite reliability (CR), average variance explained (AVE) and maximum shared variance (MSV).

Indicator	Emotional Confidence	Brand Belief	Brand Attitude
EC_1	.87		
EC_2	.89		
EC_3	.96		
EC_4	.63		
BB_1		.82	
BB_2		.83	
BB_3		.63	
BB_4		.83	
BA_1			.82
BA_2			.75
BA_3			.89
BA_4			.73
BA_5			.80
CR	.90	.86	.90
AVE	.71	.61	.64
MSV	.12	.47	.29

Source: Authors.

hypothesised relationship is 'EC will have a positive influence on BA' ( $\gamma = .35, p < .001$ ) and EC explains a 12% variance in BA; The goodness of fit statistic also suggests that the proposed model fit the data well.  $\chi^2 (26, 197) = 48, p < 0.001$ , the  $\chi^2 / df = 1.8$ , thus it is within the recommended threshold (1–3), reflecting the model's fitness. Although the  $\chi^2$  absolute fit index was significant, (suggesting a discrepancy between the hypothesised model covariance matrix and the sample covariance matrix), all other indices also show model fitness. All other model fit indices were within the suggested thresholds of the model fitness:

GFI = .94; CFI = .98; SRMR = .04; TLI = .97; and RMSEA = .06. The evidence based on the structural model also suggests that the EC influences BAs. This relationship was further investigated by adding brand beliefs as a mediating variable. The evidence suggests that the brand beliefs fully mediate the relationship between the EC and BA.

Table 2 shows the mediation effect, direct effect (i.e., the regression coefficient) without mediation accounted for .35 ( $p < .001$ ) and the regression coefficient was reduced to .13 ( $p > .05$ ) and the relationship become insignificant. A further regression coefficient of an indirect path after mediation increased to .64 ( $p < .001$ ) and the variance, explained by the mediated model in BA, is 49%, thus rejecting the null (i.e. no mediation). The model fitness statistics show that the proposed model fits the data well:  $\chi^2(62, 197) = 122, p < 0.001$ , the  $\chi^2/df = 1.9$ , and all other indices show model fitness: GFI = .91; CFI = .96; SRMR = .05; TLI = .95; and RMSEA = .07.

The mediation effect was further investigated using 5000 bootstrap sample with 95% confidence interval, the result shows that brand beliefs fully mediate the relationship between the EC and BAs. Without mediation the direct effect between EC and BA shows significant relationship .19 ( $p < .001$ ) with (95% confidence interval .11 ~ .30). With mediation the direct relationship between EC and BA becomes insignificant .07 ( $p > .05$ ) with (95% confidence interval  $-.009 \sim .17$ ). Whereas the indirect effect accounts .12 ( $p < .001$ ) with (95% confidence interval .06 ~ .35). The path from EC to brand belief shows .29 ( $p < .001$ ) with (95% confidence interval .17 ~ .43). Figure 3 presents the standardised estimates of direct and indirect effects.

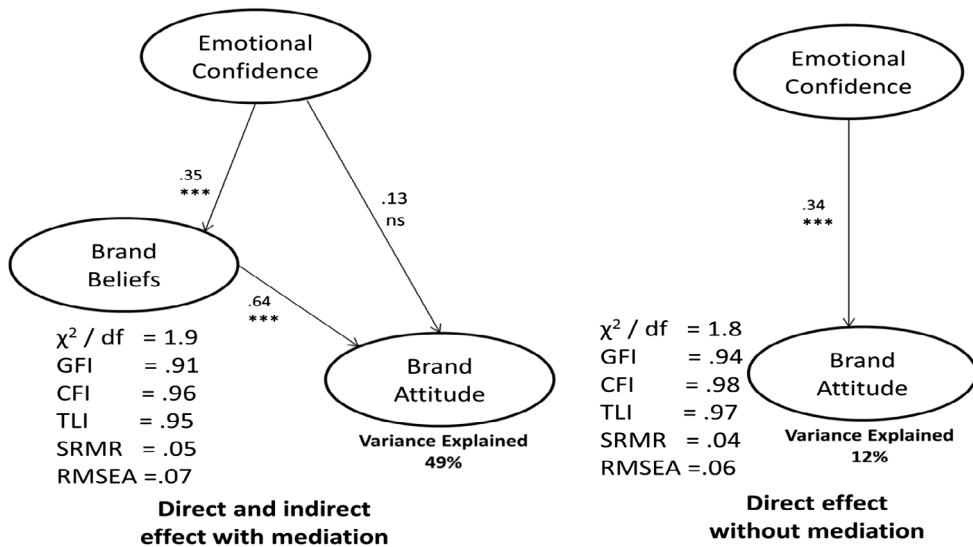
## 8. Managerial implications

Both brand beliefs and BAs are considered as basic elements that can trigger brand loyalty. Brand loyalty has been the focus of practitioners because it is associated with higher returns. However, all loyal consumers do not guarantee long term sustainability of a brand, it is essential for practitioners to isolate if consumers' loyalty is premium or mere inertia (habitual buying). This study provides an opportunity for practitioners to look behind the hood how the basic triggers of loyalty are formed, because mainly the distinction between premium and inertia loyalty can be based on one's strong emotional response towards a brand. This study provides implication for manager how and in what way strong feelings towards a product consistently update consumers' beliefs towards a product to eventually influence BA. The bidirectional nature of emotion and cognition in a car-buying context is very important because practitioners rely more on cognitive route to influence consumer attitudes the moderation brand belief between EC and BA highlight a new perspective and implication to focus on emotional perspective and it continuously influence brand beliefs that are not necessarily based on utility only. This new perspective in turn can increase overall effectiveness of practitioners, where they can make use of bidirectional nature of emotion and cognition.

**Table 2.** Direct and indirect effect.

Path	Direct effect without mediation	Direct effect with mediation	Indirect effect	Mediation effect	Variance explained without mediation	Variance explained with mediation
EC-BB-BA	.35 ( $p < .001$ )	.13 (ns)	.64 ( $p < .001$ )	Full mediation	12%	49%

Source: Authors.



**Figure 3.** Standardised estimates of direct and indirect effect. Source: Authors.

To assess effectiveness of marketing activities have been challenge for managers. Consumer Intense emotional belonging to a brand has been associated with higher returns on investment (ROI) thus managers strive to alien marketing activities to move from positive accessible reaction of consumers to intense active loyalty. Indices such as consumer-based brand equity and its components have been used to assess effectiveness of marketing activities. The intense emotional belonging of consumers can be assessed using EC toward an object. The managers can use EC either as separate index or it can also be used as complimentary construct to overall brand equity model. Correlates can be developed between overall marketing effectiveness and EC towards a brand over period of time.

Brand beliefs and BAs towards a brand have at heart marketing activities, for instance, how advertising messages should be framed so they resonate with consumers deciding between emotional and informative advertisements. The findings have shown that an implication for managers to understand that the EC can be related to BA and brand beliefs can be a mediating factor thus, it the focus should be on how overall brand experience, as a result of marketing activities, translates into an EC.

## 9. Theoretical implications

This study is amongst the first to define the concept of EC and provide empirical evidence regarding EC as a primary construct that can influence BA by recognising the bidirectional nature of both emotion and cognition and how this relationship is mediated by brand beliefs. The EC is defined, measured and employed in the model as a separate construct, it is not used as attitude strength. Conceptually, EC is not necessarily a tendency or individual difference that people possess, it is mainly based on one's emotional experience towards a brand over a period of time where one feels 'affective certainty' towards a brand. The use of EC as a separate construct would broaden scope of confidence in consumer research. It can be further used in other existing models based on a conceptual justification.

## 10. Future directions and limitations

This study is not without limitations. To begin with, the use of a convenient sample limits the results of the research to the specific sample, which means that the findings cannot be generalised to a larger population (Hair, Anderson, Tatham, & Black, 1998). This limitation would have been a problem if the purpose of this study was to test theory. However, as the main aim here was to build theory, lack of external validity becomes less of a problem. The evidence sought in this study is just preliminary and based on student sample, this study further needs to be affirmed by larger sample size (non-student sample). This study does not examine how these attitudes, based on EC, can, in turn, influence purchase intentions and buying behaviour. In the future, it would be interesting to investigate the comparative influence of attitude on purchase intentions and buying behaviour to see if attitudes are either influenced by beliefs or by EC. Second, the current research has examined the proposed relationships in the context of a high involvement product (i.e. car). Investigating the impact of EC and brand belief on BA in other product categories (e.g., low involvement products) might prove a fruitful research endeavour. Third, future research might examine the simultaneous effect of brand belief and EC on BA via polynomial regression technique. Finally, future studies should employ a longitudinal (panel) design with actual data on BA. Specifically looking into diverse range of age groups, if EC varies across different age groups.

## 11. Conclusion and discussion

The empirical evidence based on SEM suggests that EC is significantly related to BA and the relationship is mediated by brand beliefs. The results of 5000 bootstrap sample also support the mediation. Evidence sought in this study is initial though, it can generate a new stream of research where we can use EC as a separate construct, which is neither primarily based on cognition nor it is an attitude dimension. These preliminary results show that the influence of emotion-laden confidence on BA (mediated by brand beliefs) enriches our understanding as to whether EC can influence BA. That is contrary to our conceptualisation that brand beliefs primarily influence BA, this result suggests that emotion-laden responses can be primary. However, this result is just initial indication.

In the academic literature (behavioural sciences), the confidence construct is predominantly presumed to be a cognitive construct. This empirical study sheds light on this assumption and suggests that it is not necessarily true. Confidence as a construct can be based on emotions. This relationship – the influence of emotion as a primary influencing factor – also enriches our understanding in relation to other constructs like attitude, in general, it is assumed that attitudes are formed by beliefs and attitudes are post-cognitive affective responses. The mediation of brand belief between the EC and BA seems consistent with the post-cognitive nature of BA, and rightly so, as the relationship between emotions and cognition is bidirectional. However, the empirical evidence of this study specifically suggests that the post-cognitive nature of attitude is primarily influenced by EC.

## Disclosure statement

No potential conflict of interest was reported by the authors.

## References

- Abelson, R. P., Kinder, D. R., Peters, M. D., & Fiske, S. T. (1982). Affective and semantic components in political person perception. *Journal of Personality and Social Psychology*, 42(4), 619–630. doi:10.1037/0022-3514.42.4.619
- Ajzen, I. (1988). *Attitudes, personality, and behavior*. Buckingham: Open University Press.
- Allport, G. W. (1957). Attitudes in the history of social psychology. In G. Lindzey (Ed.), *Handbook of social psychology* (Vol. 1, pp. 3–56). USA: Addison-Wesley.
- Anderson, J., Gerbing, D., & Hunter, J. (1987). On the assessment of unidimensional measurement: Internal and external consistency, and overall consistency criteria. *Journal of Marketing Research*, 24(4), 432–437. doi:10.2307/3151392
- Bagozzi, R. P., Tybout, A. M., Craig, C. S., & Sternthal, B. (1979). The construct validity of the tripartite classification of attitudes. *Journal of Marketing Research*, 16(1), 88–95.
- Barbalet, J. M. (2001). *Emotion, social theory, and social structure: A macrosociological approach*. Cambridge University Press.
- Batra, R., & Ahtola, O. T. (1991). Measuring the hedonic and utilitarian sources of consumer attitudes. *Marketing Letters*, 2(2), 159–170.
- Berger, I. E., & Mitchell, A. A. (1989). The effect of advertising on attitude accessibility, attitude confidence, and the attitude-behavior relationship. *The Journal of Consumer Research*, 16(3), 269–279.
- Bernstein, V., Hakel, M. D., & Harlan, A. (1975). The college student as interviewer: A threat to generalizability? *Journal of Applied Psychology*, 60(2), 266–268.
- Clore, G. L., & Gasper, K. (2000). Feeling is believing: Some affective influences on belief. In N. H. Frijda, A. S. R. Manstead, & S. Bem (Eds.), *Emotion and beliefs: How feelings influence thoughts* (pp. 10–44). Paris: Cambridge University Press.
- Compte, O., & Postlewaite, A. (2004). Confidence-enhanced performance. *The American Economic Review*, 94(5), 1536–1557.
- Eagly, A. H., Mladinic, A., & Otto, S. (1992). Cognitive and affective bases of attitudes toward social groups and social policies. *Journal of Experimental Social Psychology*, 30(2), 113–137.
- Fazio, R. H., & Williams, C. J. (1986). Attitude accessibility as a moderator of the attitude–perception and attitude–behavior relations: An investigation of the 1984 presidential election. *Journal of Personality and Social Psychology*, 51(3), 505–514.
- Fazio, R. H., & Zanna, M. P. (1981). Direct experience and attitude-behavior consistency. *Advances in Experimental Social Psychology*, 14, 161–202.
- Fedorikhin, A., Park, C. W., & Thomson, M. (2008). Beyond fit and attitude: The effect of emotional attachment on consumer responses to brand extensions. *Journal of Consumer Psychology*, 18(4), 281–291.
- Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention and behavior: An introduction to theory and research*. New York, NY: Addison-Wesley.
- Fox, E. (2008). *Emotion science*. London: Palgrave Macmillan.
- Frijda, N. H., & Mesquita, B. (2000). Belief through emotions. In N. H. Frijda, A. S. R. Manstead, & S. Bem (Eds.), *Emotion and beliefs: How feelings influence thoughts* (pp. 43–54). Paris: Cambridge University Press.
- Gross, K., Brewer, P. R., & Aday, S. (2009). Confidence in Government and emotional responses to terrorism after September 11, 2001. *American Politics Research*, 37(1), 107–128.
- Haddock, G., & Huskinson, T. L. (2004). Individual differences in attitude structure. *Contemporary Perspectives on the Psychology of Attitudes*, 40(1), 35–56.
- Hair Jr., J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (1998). *Multivariate data analysis with readings* (5th ed.). En Glenwood Cliffs, NJ: Prentice Hall.
- Izard, C. E. (2007). Emotion feelings stem from evolution and neurobiological development, not from conceptual acts: Corrections for Barrett et al. (2007). *Perspectives on Psychological Science*, 2(4), 404–405.
- Jöreskog, K. G., & Sörbom, D. (1996). *LISREL 8: User's reference guide*. Lincolnwood, IL: Scientific Software International.

- Kidwell, B., Hardesty, D. M., & Childers, T. L. (2008). Emotional calibration effects on consumer choice. *Journal of Consumer Research*, 35(4), 611–621.
- Kleitman, S., & Stankov, L. (2007). Self-confidence and metacognitive processes. *Learning and Individual Differences*, 17(2), 161–173.
- Lazarus, R. (1982). Thoughts on relations between emotion and cognition. *American Psychologist*, 37(9), 1019–1024.
- Lazarus, R. S. (1991). Cognition and motivation in emotion. *American Psychologist*, 46(4), 252–367.
- LeDoux, J. E., Farb, C., & Ruggiero, D. A. (1990). Topographic organization of neurons in the acoustic thalamus that project to the amygdala. *The Journal of Neuroscience*, 10(4), 1043–1054.
- Lutz, R. J. (1975). Changing brand attitudes through modification of cognitive structure. *Journal of Consumer Research*, 1(4), 49–59.
- MacCallum, R. C., Widaman, K. F., Zhang, S., & Hong, S. (1999). Sample size in factor analysis. *Psychological Methods*, 4(1), 84–99.
- Mitchell, A. A., & Olson, J. C. (1981). Are product attribute beliefs the only mediator of advertising effects on brand attitude? *Journal of Marketing Research*, 18(3), 318–332.
- Olson, J. C., & Dover, P. (1976). Effects of expectation creation and disconfirmation on belief elements of cognitive structure. *Advances in consumer research*, 3(1), 168–175.
- Petty, R. E., Briñol, P., & Tormala, Z. L. (2002). Thought confidence as a determinant of persuasion: The self-validation hypothesis. *Journal of Personality and Social Psychology*, 82(5), 722–741.
- Schwarz, N., & Clore, G. L. (1983). Mood, misattribution, and judgments of well-being: Informative and directive functions of affective states. *Journal of Personality and Social Psychology*, 45(3), 513–523.
- Sears, D. O. (1986). College sophomores in the laboratory: Influences of a narrow data base on social psychology's view of human nature. *Journal of Personality and Social Psychology*, 51(3), 515–530.
- Sheppard, B. H., Jon, H., & Warshaw, P. R. (1988). The theory of reasoned action: A meta-analysis of past research with recommendations for modifications and future research. *Journal of Consumer Research*, 15(3), 325–343. doi:10.2307/2489467
- Spears, N., & Singh, S. N. (2004). Measuring attitude toward the brand and purchase intentions. *Journal of Current Issues and Research in Advertising*, 26(2), 53–66.
- Thomson, M., MacInnis, D. J., & Park, C. W. (2005). The ties that bind: Measuring the strength of consumers' emotional attachments to brands. *Journal of Consumer Psychology*, 15(1), 77–91.
- Thurstone, L. L. (1931). The measurement of social attitudes. *Journal of Abnormal and Social Psychology*, 26(3), 249–269.
- Wicker, A. W. (1969). Attitudes versus actions: The relationship of verbal and overt behavioral responses to attitude objects. *Journal of Social Issues*, 25(4), 41–78.
- Zajonc, R. B. (1980). Feeling and thinking: Preferences need no inferences. *American Psychologist*, 35(2), 151–175.
- Zajonc, R. B. (1984). On the primacy of affect. *American Psychologist*, 39(2), 117–123.
- Zajonc, R. B., & Markus, H. (1982). Affective and cognitive factors in preferences. *The Journal of Consumer Research*, 9(2), 123–131.