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Linking Meta Cognitive Awareness And Consumers' Decision Making With Respect To Brand Selection

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ABSTRACT

Human mind possess enormous meta-cognitive awareness which entails experiential information obtained in due course of consuming the product, media, technological interfaces and through other perceptual stimulus. This meta-cognitive experiential information is consciously used by the people to frame judgments. The entire set of information contributes to Meta Cognitive Awareness. Extensive discussion with respect to the meta-cognitive awareness has been made pertaining to its applicability in individuals' role performances. The current research paper is attempting to examine the phenomenon in consumers' cognitive awareness and its pertaining effects on the brand decisions. The empirical statistical analysis on the 481 consumers has been performed with respect to examine the theoretical models. This has been found through the statistical inferences that meta-cognitive awareness affects the brand selection. The results furnished the linear tendency among the predictor variables with no observance of the multi-collinearity.

Keywords: Meta Cognitive Awareness, Consumer Decision Making, Brand Selection.

1. Introduction

The dearth availability of product information with frequent intervals of information processing helps human mind shapes the sphere of brand perceptions. This makes the consumer more confused with the available choices and potentially conflicts the existing perceived value of brand with respect to its perceived understanding. Perceived understanding is an epistemic feelings resulting from person's meta-cognitive assessment of the state and his or her own knowledge about the target (Lee, 2009). Meta cognitive awareness acts as component to frame the perceived understanding and sometime draws foundation and necessary inferences to develop it.

Human mind possess enormous meta-cognitive awareness which entails experiential information obtained in due course of consuming the product, media and technological interfaces and through other perceptual stimulus. These meta cognitive experiential information is consciously used by the people to frame a judgments. Consumer now being more aware and educated acts as stimulators themselves while making the purchase decision. Extensive discussion with respect to the cognitive experiences has been made pertaining to its applicability on educational and health context. The current research paper is attempting to examine the phenomenon of meta-cognition in consumers' decision making and perceived understanding towards the brand with empirical testing on the theoretical model of meta-cognitive awareness. This paper has also attempted to know the impact of meta-cognitive knowledge and meta-cognitive regulation on the brand decision being opted by the consumers. The study has also explored the inbuilt components impact on brand decision i.e. how consumers' declarative knowledge, procedural knowledge and conditional knowledge affects the brand decision. This has also been taken into the cognitive regulation i.e. how planning, monitoring and evaluating of the cognition affects the brand selection decision.

2. Literature Review

2.1 Meta-cognition and its awareness

Meta Cognition is explained as "thinking about thinking" mostly with two components. Knowledge and Regulation (Lai, 2011). More simply "Cognition about cognitive phenomenon". Though researchers of cognitive science have contributed in several aspects and the meaning has various related inputs for last 4 decade. It is exemplified all the activities through which one tries to predict and evaluate one's own metal disposition, states and properties of the cognitive inadequacy (Proust,2007). This refers to the higher order thinking that requires active control over the cognitive process engaged in learning or doing any task (Lavingston, 1997). The term has been coined by Flavell in 1970 with the explanation as "our awareness of the learning experience" later has added "one's knowledge concerning one's own cognitive process and process or learning related to them i.e. target. Flavell has given three distinguished part of the Meta cognition person, task and strategy. Person connotes the individual characteristics and its perceptual difference with others, task is the set of information available to individual with enterprising cognition and last strategy to take the learning experience with acquired knowledge i.e. how the information would be incorporated for the situational goals i.e. problem solving and decision making. Though Hacker,1998 connotes the phenomenon quite vividly and given two distinguished component of meta cognition emphasizing that this include knowledge of one's own knowledge, process, cognitive and affective states and ability to consciously and deliberately monitor and regulate all these. Hence two broad categories have been shaped as MCK Meta Cognitive Knowledge and MCR Meta Cognitive Regulation (Figure 1). Hennessey ,1999 explained the term as Awareness of one's own thinking, awareness of the content , an attempt to regulate one's cognitive process in relationship to further learning and an application of set of

heuristics as an effective device for helping people organize their methods of attack on the problem general. Though meta cognition is awareness and management of one's own thought (Kuhn and Dean, 2004). These also include the monitoring and controlling of thought (Martinez, 2006). Monitoring refers to the assessing and evaluating the ongoing process or current state of particular thought process and controlling is to check and regulate the ongoing activities such as stopping the flow of thoughts, deciding to continue or changing it with the timeline. These two terms goes together as implementation of one is incomplete without another. Consumers Meta cognitive awareness has these two important components and often contributes to person's decisive performance. The planning, monitoring and controlling of the Meta cognitive knowledge often get influenced while making decision.

Presumption 1:
Consumers Meta cognitive awareness significantly affects the consumers brand selection decisions.

2.2 Meta Cognitive Knowledge and Brand Selection Decision
Human Judgment flow from the available declarative information about the prospects at time of judgment. Consumers evaluate the product in terms of its favorability towards the expectation and claimed perceived value. They perceive the product validity with respect to the availability of domain specific knowledge which they relate in thought process while making decision. The thought process are accompanied by meta-cognitive experiences such as ease of difficulty with which new information is processed (Schwarz, 2004). This often results into the prospective deviation between the predicted behaviors to actual behavior i.e. consumer lend to buy that product which has probably not being supported into their cognitive mind as the current state or new information has dissonant the previous thoughts. Declarative Knowledge is the knowledge about oneself and the knowledge about the factors which influence their decisive performances. This further involves perceived understanding about the information and one's own capacity to flow the same whereas conditional knowledge refers to knowledge concerning when and why to chose the particular choice i.e. knowledge of the situation or time when purchase is being occurred. Lee 2002 defined and related the conceptual and perceptual fluency with determined brand selection. He stated that brands that are perceptually fluent are more likely to be selected in stimulus based verses memory based choices situations and the reverse is true for brand that are conceptually fluent. Pham and Avnet, 2004 revealed that consumers' drawing the conclusion on the basis of mood and meta cognitive experiences as well.

Presumption 2:
Meta cognition Knowledge has significant impacts on Brand Selection.

Presumption 3:
The declarative knowledge, procedural knowledge and conditional knowledge are significantly affects the selection decision.

2.3 Meta Cognitive Regulation and Brand Selection Decision

Regulating and monitoring the thoughts often leads to the awareness that what is going on in our own mind. What we experience in our conscious mind i.e. information depicts our own cognitive process and activities. This information is further processed in forming judgments, guiding behavior and decision making process (Strle 2012). This also to be noted that information or content which is available in conscious experience and hence can be miss- informative leading to wrong judgments. Regulation includes planning monitoring and evaluating the cognitive information which one possesses while making decision or doing some activity. Regulation of cognition often give impact to the decision making (M. Carroll and Batha, 2007) as this has ability to change or deviate the direction of thought processes and young customer often gets engage in this type of regulation when emotions persistently affects the cognition and then this further influenced the decisive capacity. The brands perceived value often gets evaluated by the consumers as the brand presentation adds some knowledge into the cognition. Lee and Larboo (2004) said that presentation of a cue associated with high conceptual fluency leads to a more favorable attitude towards the products though this has applicability on brand selection as well.

Presumption 4:

There is significant relationship between Cognitive regulation and brand selection decisions.

Presumption 5:

The Planning, Monitoring and Evaluation of cognitive experiences affect the brand selection decisions.

3. The conceptual gap identification and novelty of the study

The concept meta-cognitive awareness has been widely discussed over a period time in the field of health sector, education. Consumers Psychology pertaining to the awareness applicability on brand decisive ability is being identified as conceptual research gap. Hence, the objective of the current study is to understand the links between the consumer's meta-cognitive awareness and the brand selection decision.

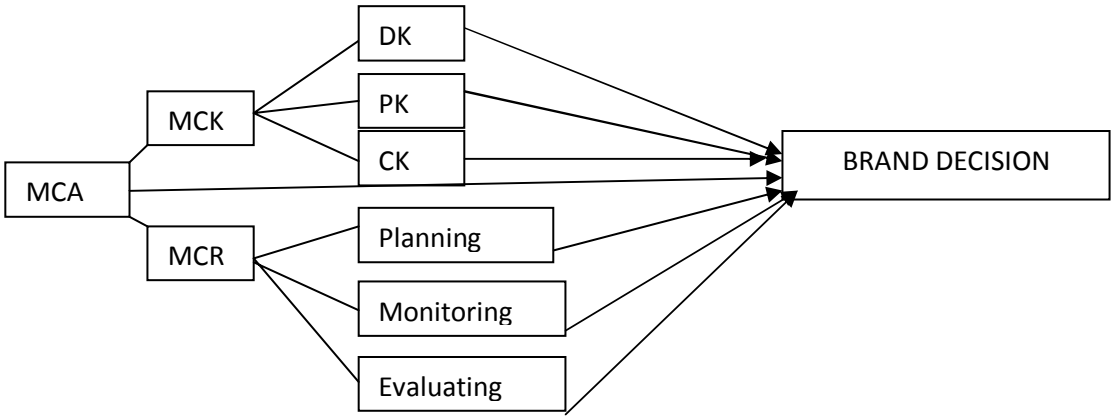

Figure 1: Conceptual Framework of the study

4. Research Methodology

The empirical survey was administered to examine the conceptual framework. To investigate the predictive behavior of the conceptual variables respondents were approached in the Nakhon-Nayok Shopping Malls covering the wider range of klong 4 to klong 10. Major shopping malls like Big C and Tesco is being observed as sample area in the current study. The total 500 respondents have been approached out of which 481 have successfully participated into the study. The respondents' profile with respect to the demography is depicted in the table 1. The male and female participation in the study has been reported as 35% and 65% respectively. The highest participation of the respondents age group belongs to 36 to 45 years undertaking the 43% participation where as the age group of 46-55 has reported with 35 % of the participation. The respondents' qualification has been reported highest with the post-graduation i.e. 40%. As per the occupation is concerned the maximum participation has been reported with self employed and non-government sector with 40% and 38% respectively. Majority of the respondents who have participated into the current study are earning more than 50000 baht per month. The survey method has been incorporated for the collection of data and structure questionnaire was administered. The SPSS has been utilized to furnish the analysis and respective findings. The current research administered the multiple regression analysis to explore the relationship tendency among the predictors' variables on the brand selection decision. Further to meet the assumption the predictors have been tested for multi-co linearity effects.

5. Instrument Description

After understanding the concept in educational psychology and cognitive studies the measuring instrument has been developed with a 27 construct in 5 point likert scales where the structure of the scale is being observed 5 as "strongly agree" to 1 as "strongly disagree". The domain of the cognitive awareness has been measured under the segregation of Meta-Cognitive Knowledge (MCK) and Meta Cognitive

Regulation (MCR). The Six sub scale has been used to measure the Meta cognitive Awareness. In the instrument item number 1 to 4 represents the Declarative Knowledge, item 5-8 measures the procedural knowledge and item 9-13 represents the cognitive knowledge, this has further taken item 14 to 18 for planning the cognition, item 19-23 measures the monitoring and item 24 to 26 represents the evaluating the cognition, the 27th item has taken to obtain comprehensive response. The construct item such as "I can motivate myself in decision making with respect to the choice of brand on available information", "I periodically review to help me understand about important new brand information" etc have been used into the study. The content validity has been observed with the content experts of the domains. The item analysis was performed with 40 samples, which indicated high reliability with cronbach's alpha .95 score.

Table: 1. Test of Reliability and Validity

S. No.	Dimension	No. of Items	Cronbach Alpha	KMO Value	Chi-Square Value	DF	Sig. Value
1	Overall Scale	27	.957	.715	1.389	325	.000
2	Declarative Knowledge	4	.818	.717	799.622	6	.000
3	Procedural Knowledge	4	.868	.826	950.152	6	.000
4	Conditional Knowledge	5	.839	.820	970.435	10	.000
5	Planning	5	.815	.736	1.097	10	.000
6	Monitoring	5	.841	.826	1.016	10	.000
7	Evaluating	3	.871	.640	881.740	3	.000

The cronbach's alpha was used to estimate the reliability of the research constructs. The Table no. 1 indicates the scores of cronbach's alpha, which is very high, and the cronbach's alpha if the items deleted are also very high. Hence the item analysis indicates that individual item have secured high reliability score. The cronbach's alpha score for all the 27 items is .957 and for the individual dimensions, it is .818, .868, .839, .815, .841, .871 viz., which holds high reliability.

The KMO and Barletts' test indicates that KMO & Chi-Square value for all dimensions is high with .715, .717, .826, .820, .736, .826, .640 viz. And the sample size chosen is more appropriate for the study.

6. Analysis & Discussion

Presumption 1:

Consumers Meta cognitive awareness significantly affects consumers brand selection decisions.

The multiple regression analysis indicated in Table no. 2 was performed based on the enter method shows that meta cognitive awareness significantly affects brand selection decisions. The overall model was explained by 50% of variance which was statistically significant, F (1, 479) = 472.490, p< .05 to predict the Brand Selection Decision. The individual predictor variables of Meta cognitive awareness (Knowledge and Regulation) have found as significant predictors of brand selection decision. The Meta cognitive awareness observed with significant & positive beta value in standardized coefficients (Beta=.705, P<0.05) which indicate that it is highly associated with the Overall Brand Selection Decision. The R^2 and the adjusted R^2 values indicate the model is fit at 50 % and 49%, respectively. As per the collinearity diagnostics, it is obvious that there is no multi collinearity effect among the predictor variables being observed in the current study.

Presumption: 2

Meta cognition Knowledge have significant impact on Brand Selection Decision.

The multiple regression analysis indicated in Table no. 2 was performed based on the enter method shows that meta cognitive knowledge have significant impact on brand selection decision. The overall model was explained by 45% of variance which was statistically significant, F (1, 479) = 472.490, p< .05 to predict the Brand Selection Decision. The individual predictor variables of Meta cognitive knowledge (Declarative Knowledge, Procedural Knowledge and Conditional Knowledge) have found as significant predictors of brand selection decision The Meta cognitive knowledge observed with significant & positive beta value in standardized coefficients (Beta=.668, P<0.05) which indicate that it is highly associated with the Overall Brand Selection Decision. The R^2 and the adjusted R^2 values indicate the model is fit at 45 % and 46%, respectively. As per the collinearity diagnostics, it is obvious that there is no multi collinearity effect in the predictor variable being observed in current study.

Presumption 3:

The Declarative Knowledge, Procedural Knowledge and Conditional Knowledge are significantly affecting the brand selection decision.

The multiple regression analysis indicated in Table no. 2 was performed based on the enter method shows that declarative knowledge, procedural knowledge and conditional knowledge have significant impact on brand selection decision. The overall model was explained by 61% of variance which was statistically significant, F (3, 477) = 247.57, p< .05 to predict the Brand Selection Decision. The individual predictor variables of declarative knowledge (B=-.240; P<0.05), procedural knowledge (B= .818; P<0.05) and conditional knowledge (B=.144; P<0.05) have found as significant predictors and it is highly associated with the Overall Brand Selection Decision. Altogether the declarative knowledge, procedural knowledge and conditional knowledge have significant impact on brand selection decision. The R^2 and the adjusted R^2 values indicate the model is fit at 61 % and 60%, respectively.

Presumption 4:

Cognitive regulation has significant impact on brand selection decisions.

The multiple regression analysis indicated in Table no. 2 was performed based on the enter method shows that cognitive regulation have significant impact on brand selection decision. The overall model was explained by 47% of variance which was statistically significant, F (1, 479) = 419.43, p< .05 to predict the Brand Selection Decision. The individual predictor variables of cognitive regulation (Planning, Monitoring and Evaluating) have found as significant predictors of brand selection decision The cognitive regulation observed with significant & positive beta value in standardized coefficients (Beta=.683, P<0.05) which indicate that it is highly associated with the Overall Brand Selection Decision. The R^2 and the adjusted R^2 values indicate the model is fit at 47 % and 46%, respectively. As per the collinearity diagnostics, it is obvious that there is no multi collinearity effect in the predictor variable being observed in current study.

Presumption 5:

The Planning, Monitoring and Evaluation of cognitive experiences affects the brand selection decisions.

The multiple regression analysis indicated in Table no. 2 was performed based on the enter method shows that planning, monitoring and evaluating have significant impact on brand selection decision. The overall model was explained by 47% of variance which was statistically significant, F (3, 477) = 140.078, p< .05 to predict the Brand Selection Decision. The individual predictor variables of planning (B= .286; P<0.05), monitoring (B= .158; P<0.05) and evaluating (B=.308; P<0.05) have found as significant predictors and it is highly associated with the Overall Brand Selection Decision. The R^2 and the adjusted R^2 values indicate the model is fit at 47 % and 46%, respectively.

Model	Unstandardised Coefficient		Standardised Coefficient						
	B	SE	B	t	p	F	R	R^2	VIF
Constant	.124	.194	-	.63	.52	472	.70	.49	1.0
MCA	.040	.002	.705	21.7	.00	-	-	-	-
Constant	.295	.206	-	1.4	.15	385	.66	.44	1.0
MCK	.328	.017	.668	19.6	.00	-	-	-	-
Constant	.939	.179	-	1.4	.15	247	.78	.60	1.0
Declarative Knowledge	-.343	.056	-.240	-6.14	.00	-	-	-	-
Procedural Knowledge	.986	.054	.818	18.77	.00	-	-	-	-
Conditional Knowledge	.180	.051	.144	3.55	.00	-	-	-	-
Constant	.644	.180	-	3.57	.00	419	.42	.68	1.0
MCR	.303	.015	.683	20.48	.00	-	-	-	-
Constant	.679	.183	-	3.70	.00	140	.68	.46	1.0
Planning	.345	.065	.286	5.3	.00	-	-	-	-
Monitoring Evaluation	.208 .348	.083 .062	.158 .308	2.5 5.5	.00 .00	- -	- -	- -	- -

The statistical inferences being observed into the study has supported all the presumptions. The study has observed the significant impact of meta-cognitive awareness on brand selection decision. This depicts that consumers' perceived value of brands often gets impacted with meta-cognitive awareness i.e. how nicely they develop the content domain and how frequently they regulate the information to make the decisions. The second and third presumption which has been taken with a intention to probe the intervening relationship has facilitated the understanding that each component of the meta cognitive knowledge has significant impact on the brand selection decision i.e. The consumers thought process connect with their procedural knowledge and relate the same with the declarative information available to them and based on the conditional knowledge they opt for the brands. While further discussing the part of the regulation of the available knowledge in cognition of the consumers' mind, the statistical inferences have supported the presumption 4 and 5. This depicts that consumers have set of regulation with planning, monitoring and evaluating of the cognitive knowledge every now and then which significantly contributes to the decisive conclusion of brand selection. Regulating the knowledge database implies the right execution of the processing fluency of information with planning, monitoring the respective flow and evaluate the current inclination with the knowledge in cognition.

7. Conclusion

The study has intended to observe the affects of meta-cognitive awareness and its components on the consumers' brand selection decisions. This has explored the linear relationship tendency among the studied variables. The study has observed with positive results of the incorporated presumptions. The perceived understanding of the brands and its pertaining meta-cognitive awareness plays important role in brand selection decision. Consumers' knowledge data base has several set of feelings, ideas and phenomenon established into his tacit and explicit dimensions over a period of time. This attracts the consumers' attentions to replace, regain, renew and revitalize the existing cognitive data base with respect to the perceived understanding of the Brand. The current findings give the insight that today consumers are very much aware with respect to themselves, their need and suitability of the fit between the available information and its implications on their decisive competency. Each purchase decision contribute to their meta-cognitive awareness and their persistent craving to know more towards the available choices make themselves more prone to switch the brands. Though studying the cognitive phenomenon in the consumers' perspective has portrayed the need of more in-depth study into neuro- phenomenology in the consumers' conscious and unconscious awareness. This may relate to know the spot decision making consequences and its impacts on the consumers further brand perseverance and respective selection decision.

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