Int. J. Media. Mas. Com. Vol. 04, No. 02, 164-122 (2022)
DOI: 10.46988/IJMMC.04.02.2022.007
ISSN: 2536-0035
ISBN: 2535-9797
Arab Impact Factor (1.04) (2021).

International Journal of Media and Mass Communication المجلة الدولية للإعلام والاتصال الجماهيري

# *A Conceptual Review on Heuristic Systematic Model in Mass Communication Studies*

Dr. Hussein Khalifa Hassan Khalifa

***Assistant Professor at Radio and TV Department, Faculty of Mass Communication, Cairo University, Egypt and College of Administrative and Financial, Gulf University, Kingdom of Bahrain.***

Email: dr.hussein.khalifa@gulfuniversity.edu.bh, h-khalifa@cu.edu.eg

*Received: 01 April. 2022* *Revised: 20 May. 2022* *Accepted: 15 June. 2022* *Published: 01 July 2022*

## Abstract:

This research reviews the Heuristic-Systematic Model (HSM). It investigates how communication signals might influence people's opinions Shelly Chaiken (1987) developed this model, which is a dual-processing model with two information processing modalities, the first of which is: Heuristic processing, which includes features that are part of The message's source, template, length, and case name are all instances of "Heuristic Cues" that are given in the message to allow for a quick evaluation of the message's validity. The second kind is in-depth processing (Systematic processing), which searches the substance of the message. To arrive at an accurate assessment of the message. In social psychology, binary information-processing models give empirical evidence for distinguishing the many ways individuals think about politics. Over the last two decades, binary information processing models have grown in prominence in social psychology. Individual and collective decision-making, preconceptions and biases, personal perception and social categorization, individual and group decision-making, and even fundamental memory mechanisms are all explained by these theories.

**Keywords: Heuristic Systematic Model; Mass Communication; Public Opinion**

## Introduction

The Heuristic-Systematic Model (HSM) emerged from persuasion research in social psychology, which explores how communicative messages may affect people's opinions. Shelly Chaiken (1987) introduced this model, which is a dual-processing model with two

modalities of information processing, the first of which is: Heuristic processing, which contains elements that are a component of The source of the message, the template, the length of the message, and the case name are examples of "Heuristic Cues" that are included in the message for a rapid evaluation of the message's legitimacy. The second kind is in-depth processing (Systematic processing), which searches the message's content. To establish an accurate appraisal of the message. (Xin Robert Luo, 2013)

The binary information processing models in social psychology provide empirical evidence for identifying the different ways people think about politics. (Shelly Chaiken, 1999)

Binary information processing models have gained great importance in social psychology during the last two decades. These models explain a large variety of psychological phenomena including attitude formation and change, attitude relationship to behavior, stereotypes and biases, personal perception and social classification, individual and group decision-making, and even basic memory mechanism. (Alexander Todorov, 2002)

The model has undergone many developments. Initially, the model identified two methods of information processing: in-depth and inferential processing. Then, the model was expanded to include the psychological conditions to trigger the processing pattern in terms of the difference between actual and desired personal confidence. Finally, the model was expanded to include two additional types of motives: defensive motives, and social motives in addition to the motives for accuracy that are assumed to exist in most persuasive cases. (Aumer-Ryan, 2009)

The model is particularly well suited to explaining the validity of judgments in an online environment because of its distinction between rapid inferential assessment, reduced effort, and in-depth, high-effort analysis. (Zhiming Liu, 2012) It provides comprehensive and appropriate explanations of how individuals process information in the context of electronic communities. (D. Eric Boyd, 2009) The model assumes that individuals seek a balance between the desire to make accurate judgments and the desire to reduce the cognitive effort involved in processing information. (Joseph F. Brazel, 2004)

The model indicates that the contextual information included in a case affects how the individual processes the information, as the choice of either of the two processing methods depends on the characteristics of the content of the case. Time pressures and effort conservation dominate, as decision makers try to strike a balance between reducing cognitive effort and confidence in their decisions. (Shelly Chaiken, When parsimony fails. , 1999)

Inferential tools in binary processing models refer to some salient and easily manipulated information that automatically leads to a specific cognition such as the experience of the source and thus activates the memory base of decisions such as expert statements that can be trusted that mediate the process of persuasion. (Robert J. Griffin, 2002)

Eagle & Chaiken (1993) defined inferential processing as "a method with limited capabilities for processing information that requires the least cognitive effort and a limited number of cognitive sources for in-depth processing." In-depth processing is that method of processing that involves making a great and comprehensive effort to analyze and understand information. (Ngai., 2011)

**Similarities and differences between the HSM model and the ELM model for information processing**

The Heuristic-Systematic Model is similar to the Information Processing Model (Elaboration Likelihood Model), where both models suggest two methods of information processing, where the Systematic Processing in the HSM model is similar to the Central Route in the ELM model, while Heuristic Processing in the HSM model simulates the Peripheral Route in the ELM model. marginal/inferential information with least mental effort to central/in-depth evaluation of all information related to an issue with greatest mental effort in evaluating information. (Kenneth S. Bordens, 2012)

One of the differences between the two models lies in the dependence of the (HSM) model on inferential tools more commonly, as individuals rely most of the time on them if they do not have a high level of motivation and mental abilities. (Aumer-Ryan, 2009)

The ELM model describes changes in individuals' attitudes due to their evaluation of information sources and shows how these changes can lead the individual to focus either on marginal tools or the content itself, while the HSM model describes how the capabilities and motivations of individuals can lead to focus either on inferential processing Few Efforts or high-voltage in-depth processing. (Wyner., 2011)

The (ELM) model has been used by researchers in the field of marketing in order to understand what makes information more persuasive, while the (HSM) model has been used by researchers to apply it to information seeking situations in which individuals are primarily motivated to get destinations Accurate consideration harmonizes with relevant knowledge. (Goh Say Leng, 2011)

The main difference between the two models lies in the timing of their occurrence. In the HSM model, the two processing methods occur independently and also can occur simultaneously at the same time, while in the ELM model, the two processing methods are inversely related, in case one of them increases, the other decreases. (Chaiken, 1999)

**Methods of forming attitudes according to the model.**

Attitudes according to the model arise from assessments that represent a summary of cognitive, affective, and behavioral experiences. As such, trends are represented in memory not only as a simple assessment of case evidence but also in a more complex form in terms of structural form as cognitive, affective, and behavioral clues also appear. As evidence related to the case. (Turgeon, 2000)

Attitude has long been defined as the cause of behavioral intentions, and according to Azjan and Fishbein, it can be divided into two main parts: attitude toward the objects, attitude toward the behavior. (Vohs., 2007)

The model identifies two basic methods through which trends and other social judgments are formed, namely, the first: in-depth processing, which is the type of processing that entails a comprehensive analytical processing of information related to the formation of judgment; Where judgments are formed based on the response to the actual content of the information, and therefore it requires both cognitive capabilities and competence, and the second method is inductive processing, which is the type of processing that requires activation and application of discretionary rules or inferential tools such as cognitive structures that are learned and stored in the memory such as “Confidence in the opinions of experts,” “The length of the message indicates its strength,” and “The consensus of the majority opinion indicates correctness.” (Erin Seekamp, 2010)

Thinking enhances the growth of trends because it affects the balance of cognitive efforts related to the growth of trends by pushing them towards the maximum level of information processing, and more specifically, thinking increases opportunities for fruitful processing as it provides individuals with more time and higher motivation to process information, including In particular, the full realization and understanding of the issue around which the trend is formed, the recall of considerations related to the trend from memory, and the integration of these considerations retrieved in the same direction, and the abundance of information related to a particular topic that provokes thought promotes and enhances the growth of the trend. (Chaiken S. , 1980)

Individuals carefully consider any information available to them when forming an opinion to determine whether that information is valid and accurate. Then, trends are formed based on conclusions drawn from careful consideration of the facts. But this method of in-depth processing of information requires considerable effort. Conversely, when individuals do not have the time or ability to think carefully, the model suggests another method for forming attitudes. It is an easy and simple method that relies on simplified rules of knowledge as inductive tools to determine the trends that should be. (Serena Chen, 1999)

The model assumes that individuals adopt inferential processing by using semantics while evaluating information, especially when these individuals are not able or have sufficient incentive to process the information. Using inductive tools and does not require high cognitive and mental abilities. (Michael Chattalas, 2008)

**Characteristics and attributes of the two types of processing**

The model assumes that individuals adopt strategies through a continuum of effort in processing information based on their motivation and cognitive abilities. The inferential path of processing information by relying on shortcuts to knowledge. (Maheswaran., 2004)

Deductive processing involves the use of tools and the application of rules that allow the formation of a judgment with the least and quickest cognitive effort, for example the use of the rule “what is beautiful is good”, “experts are right”, which can lead to one member of one group agreeing with members of another group more more attractive or more experienced regardless of the quality and validity of the data issued by that group. Thus, this type of processing occurs when individuals use case-related semantics or tools to process information with minimal cognitive effort as superficial or shallow processing. (Roger Giner-Sorolla, 2002)

Judgments that are formed on the basis of inferential processing reflect a superficial and simple treatment of inferential tools related to judgment. One example of the use of inferential processing of information by individuals is "the length of the message indicates its strength." or “the opinion of the majority is right.” Individuals who use this principle form their judgments based on what the majority says. (Robert J. Griffin, Linking the heuristic-systematic model and depth of processing. , 2002.)

The inferential tools that individuals use to form their attitudes and make their decisions stem from experience, and they also have some empirical validity, such as “trusting the opinions of experts,” “consensus indicates right.” The implications of these tools are raised by their presence, such as presenting the results of a public opinion poll in which the majority agrees on A situation, this would raise the meaning of “consensus indicates correctness.” (Pan., 2010)

Compared to inferential processing, in-depth processing is more useful, requires more cognitive resources and takes more time. According to the model, individuals tend to reduce their time and knowledge resources if they lack motivation or mental abilities. Among the factors likely to influence individuals' investment or non-investment of their sources of knowledge are the importance of the issue, perceived risks, time pressures, skill level, and distraction. (Borah, 2011)

In-depth processing is a comprehensive and analytical processing of information. Individuals examine the available information related to the case very carefully and assess the validity of the communicative situation by studying the information and comparing it with their prior knowledge of the case. In-depth information processing involves extensive processing of arguments and evidence and is thus governed by individuals' motivations and sources of knowledge. Although individuals may not be aware of the nature of their deep processing, they are aware and aware of the content of the ideas related to the message and that such thoughts are supposed to mediate the effects of the deep processing method. In-depth processing values the reliability of the source and content of the message, which may exert a stronger persuasive effect when determining the validity of the message. Judgments resulting from in-depth processing depend largely on the intensity of information processing related to the judgment and response according to the semantic content of the message. In the event that recipients do not have sufficient knowledge of an issue, or the information is processed under time pressures, it is likely that the different forms of in-depth processing will be less aware of. (Shelly Chaiken A. L., 1989)

Depth processing occurs when individuals make a significant cognitive effort to process information; Where the deep thought resulting from comprehensive and comprehensive information on all aspects of the issue constitutes an important and required pillar in the participatory processes in which the participating individuals study the relevant information and its results accurately and fairly. (Ajzen, 1999)

In-depth treatment depends in its diagnosis on the content of the message, specifically the understanding and cognitive response to evidence and persuasive arguments, in contrast to the inferential treatment that depends on factors not related to the content of the message such as the experience of the source, the attractiveness of the source, the consensus of opinions about an issue as a basis for forming trends. (D. Eric Boyd, 2009)

The model assumes that in-depth processing that includes all the information in the content will only occur at higher levels of motivation and cognitive abilities, while lower levels of motivation will reduce in-depth processing while increasing inferential tools. (Shrum., 1999)

**Mechanisms for choosing either type of treatment**

Individuals may find inferential processing sufficient for less important issues, but for very important issues, the individual may feel the need to process information more comprehensively as in-depth processing leads to deeper and more informed judgments. Accordingly, individuals tend to first use inferential processing when they want to form a decision; But if the individual feels that his confidence in the resulting decision does not reach the required level, this will prompt him to process the information in a more in-depth manner to reach the decision that he deems acceptable/satisfactory. (Chaiken S. , 1980)

When individuals find that there are high-risk outcomes, this will prompt them to engage in in-depth processing, while when individuals are explicitly informed that the hazardous effects are low, it will prompt them to engage in heuristic processing. (Kurt Neuwirth, 2002)

Recipients place more value on economy of effort than reliability when they perceive the issue as unimportant. When economic concerns predominate, recipients are likely to use inferential processing when forming their attitudes, while when reliability concerns predominate, recipients are more likely to use in-depth processing. When recipients realize the importance of forming very precise trends, they are likely to use in-depth processing.

Some scientific literature has indicated that time pressure is one of the factors that limit the ability to address issues in an in-depth manner, which leads individuals to form their judgments based on deductive tools in the event of time pressures.

Inferential processing is subject to availability, access, and application. Where availability refers to the fact that the cognitive structures or inferential tools are stored in memory for future use, while access refers to the ability to retrieve them from memory for use, while the application indicates their relevance and linkage to the subject of the case. It also requires a minimum of cognitive effort and thus provides the benefit of economy of effort to the recipient.

The model evokes two levels of motivation. First, it identifies the internal conditions and conditions for triggering in-depth processing; In other words, it identifies and clarifies the sufficient level of motivation. The second: It identifies the different qualitative types of motives that can appear in a situation. The two levels of motivation express the quantitative and qualitative nature of motivation, and the quantitative hypothesis of the model is expressed by the principle of sufficiency.

**Sufficiency Principle**

The principle of sufficiency reflects a set of concepts and ideas such as "limitation of knowledge sources", as well as "economy of thinking" where the model integrates the concepts of effort economy into the principle of adequacy, which states that recipients try to establish a kind of balance between reducing cognitive effort and satisfying their motives. For example, recipients who are motivated to form accurate judgments will make as much cognitive effort as they can until they reach a sufficient degree of confidence that their judgments meet their accuracy goals.

The principle of motivational adequacy to engage in information processing is depicted as a function of the difference between actual and desired confidence in an individual when dealing with a specific issue. The greater the disparity between actual and desired confidence, the greater the likelihood that an individual will engage in in-depth treatment. The principle of adequacy attempts to strike a balance between making the least effort (in which individuals prefer to process information with the least effort) and the individual's interest in accuracy (where individuals like to form accurate judgments).

Recipients make a cognitive effort so that their actual level of confidence (if possible) reaches their minimum sufficiency, thus closing the gap between actual and desired levels of confidence. When low-effort inferential processing fails to provide sufficient confidence to form judgments (or cannot occur due to—for example, the absence of any information relevant to judgment based on heuristic tools) recipients are likely to engage in in-depth

processing in an attempt to close the confidence gap.

Thus the principle of adequacy is directly related to the choice of either treatment method; This principle specifies that individuals resort to in-depth treatment only if their actual confidence is less than their desired confidence, which means that the desired confidence acts as a determinant of adequacy to provoke in-depth treatment. The principle of adequacy, as indicated by Eagle & Chaiken, asserts that individuals will make every effort to reach a sufficient degree of confidence that enables them to achieve the goals of their treatment.

**Motives Processing**

The model assumes that the level of motivation determines how individuals process information necessary to form judgments about topics. When the level of motivation is low, the model assumes that individuals process information in a deductive manner in order to simplify and speed up the formation of judgments.

The motives predict the nature of the knowledge that will occur, and express the qualitative imposition of the model, where the model distinguishes between three main types of motives, which are: The first type: the motives of accuracy, which refer to the desire of individuals to process information related to the issue with an open mind and fairness, and in a more clear manner. The motive for accuracy can direct individuals to pay attention to more information; This would make their judgments more enlightened.

When people are motivated by accuracy, they process information more deeply, very carefully, and also make more cognitive effort. When the level of motivation is low, and information about the case is limited, audiences with accuracy motivation are likely to rely in forming their attitudes on inferential processing that appears best suited to achieving their accuracy goals. But if the level of motivation is high and the sources of knowledge are sufficient, this enhances the forms of in-depth treatment to reach the desired level of accuracy.

There are two things to note about the precision motive. First, the motive for accuracy does not preclude processing biases. It is possible that in-depth processing is biased by prior knowledge or precursors, yet precision-motivated individuals try to be objective even if the processing is biased. Second: Accuracy can be achieved through in-depth or inferential processing, or both. Although deductive processing can lead to less accurate judgments than its in-depth counterparts, in light of the experience with inferential tools and in certain circumstances, they can be accurate.

The second type: Defense motives, which refer to the desire of individuals to preserve/defend his beliefs and tendencies that he has formed. Whereas the defense motive aims to confirm the validity of the preferred directions and to prove the error of the unfavorable directions. As in the motive of accuracy, the motive of defense can be treated in an in-depth or deductive manner, or both. The model assumes that defense-motivated individuals use the same cues as precision-motivated individuals but in a selective manner, so that cues that match trends for defense-motivated individuals are likely to be used, while cues that conflict with those tendencies are likely to be ignored.

When defense motivation is high and individuals have sufficiently knowledgeable resources, it will prompt them to process in depth but in a biased manner. Information that

aligns with existing trends will be positively evaluated and information that does not align with those trends will be scrutinized for error. The style of defense motive treatment also depends on the differences between actual and desired confidence.

For example, the indications that contradict the individual's tendencies will reduce the individual's actual confidence and thus increase the confidence gap. Here it is required that the individual engage in in-depth, biased treatment to reduce this gap, but if the indications agree with the individual's trends, this increases the actual confidence of the individual, which leads to the existence of a gap Low confidence that the individual may engage - and insignificantly - in in-depth treatment. The defense motive also follows the principle of adequacy as well as the motive of accuracy; But unlike the situation in the motive of accuracy, the required level of adequacy in the defense motive is determined based on the degree to which the treatment supports and enhances the tendencies of the individuals and is not the treatment that results in accurate judgments.

The third type: social motives, which refer to the individual's desire to adopt and form knowledge and trends that meet immediate social goals. Social motives are concerned with personal outcomes while expressing a trend/opinion in a specific social context. Like defense motives, social motives are characterized by selective bias, where selectivity by inductive and in-depth treatment aims to meet urgent social goals rather than maintaining existing knowledge and trends. An example of this is selective bias. Inferential treatment of social motives requires the selection of inferential tools such as "moderate opinions reduce disagreement," which supports smooth interaction and discussion between people with unexpressed views, while when views are expressed, the use of "going along" may serve the same the goal (which is to achieve social harmony).

Addressing social motivations aims to assess what is socially acceptable knowledge and attitudes in various situations. It is thus possible that socially motivated individuals may not make informed judgments. For a more accurate description of social motives, this requires knowledge of the contexts of influence, because what constitutes a socially acceptable trend will be linked to some factors, for example, compatibility and harmony with the trends of others may be more acceptable in some cases than in others.

Social motives are subject to the principle of adequacy as are the motives of accuracy and defense. The required level of adequacy corresponds to the desired confidence that satisfies immediate personal interests. Thus, the level of adequacy of social motivation represents the degree of processing at which the recipient feels that they have enough confidence in their decisions to meet their personal goals. Inferential processing provides sufficient confidence in situations that elicit the desired level of social motivation, while when social motivations are high and cognitive abilities are available, recipients are likely to resort to in-depth treatment that achieves their social goals.

The high levels of motivation and mental abilities when addressing the topics enhances the strength of the evidence and arguments presented in the letters about the implications associated with the source of the message.

The model assumes that individuals focus more on their desire to reduce the cognitive effort involved in processing information when the desired levels of confidence are like the actual levels of confidence, and therefore they resort to inductive tools when forming their judgments.

When the gap between actual and desired confidence in a decision widens, it helps to enhance in-depth processing because of an increase in someone's desired level of adequacy or as a result of a decrease in someone's actual level of confidence (such as when information about a judgment contradicts prior knowledge).

It is worth noting that when individuals hold multiple motives for processing information, this will motivate them to have that processing of medium depth, whether in in-depth or inferential processing. It is also important to emphasize that the type of motivation is independent of the treatment method. In-depth or inferential treatment can use any of the three types of motivation, and in the same way, treatment through motivation follows the principle of sufficiency.

**Simultaneous occurrence of both types of treatment**

Inferential processing of information occurs when levels of motivation and cognitive abilities are low while inferential processing of information occurs when levels of motivation and cognitive abilities are high. When inferential processing alone cannot lead individuals to achieve the desired level of confidence in their judgments, individuals are likely to resort to in-depth processing even though it requires more effort. The model emphasizes that both processing methods can occur concurrently.

The model assumes two methods of information processing. Individuals can process information either in an in-depth manner (by paying attention to all the details and information related to the case) or in a deductive manner (by focusing only on a subset of the information semantics), but it is possible for both methods to occur at the same time. This is done through three different forms:

The first form: reinforcement, if the results of in-depth and inferential processing agree with each other, that is, they have common effects. This is what was shown in one of the studies that dealt with the possibility of combining the two types of treatment, where the respondents were asked to make evaluations of a particular product, and when the results of the brand indication matched the results of the product characteristics, the participants believed that their evaluation of the product was very important based on both types of treatment. In this case, the confidence in the results will be higher than using a single method of treatment.

The second figure: the inconsistency, which indicates that both types of processing can operate in opposition, resulting in the in-depth processing weakening the effects of inferential processing. In one study, high-motivated respondents were provided with information about majority agreement that may or may not match individual information on the issue. When inferential processing results derived from majority opinion agreement did not match the results of in-depth processing, these high-motivated participants relied solely on their strong knowledge. To form their knowledge and attitudes.

The third figure: Bias, which refers to the idea that the results of inferential processing can establish expectations about the issue that may be biased by the nature of in-depth processing. It is possible that this bias may occur, for example, during the follow-up of the case, where the individuality of the information is ambiguous and thus subject to many varying interpretations, or when such information is not available, but the recipient’s resort to forming their knowledge about the case with the information they have. This means that

inferential processing may direct the nature and scope of in-depth processing in a specific direction.

**Effects of both types of treatment**

Individuals who process information inferentially do not differentiate between strong and weak messages in addition to being influenced by the semantics of the more apparent and less important information such as the attractiveness of the source of the message. Individuals who process information in an in-depth manner differentiate between strong and weak arguments and are not affected by any variables unrelated to the intrinsic message content, such as message length.

Trends resulting from inferential processing only are likely to be less stable, less resistant to counterarguments, and less predictive of future behavior than trends from in-depth processing. The trends resulting from the in-depth treatment are often more permanent and continuous, while the trends resulting from the inferential treatment are often more volatile.

**Model Hypotheses**

H.1: Individuals adopt one of the two methods of treatment depending on their motives and mental abilities. H.2: The in-depth treatment is more useful than the inferential treatment H.3: Individuals tend to establish a kind of balance between the economy of effort and the satisfaction of their motives. H.4: In-depth treatment leads to the formation of more ideal judgments than inferential treatment . H.5: inconsistency occurs when the results of the in-depth processing conflict with the results of the inferential processing, and the reinforcement occurs when the results of the in-depth processing coincide with the results of the inferential processing, while the bias occurs when the inferential processing directs the in-depth processing in a certain way. H.6: Individuals adopt motives for accuracy when they want to form judgments characterized by impartiality and accuracy, while individuals who have a defense motive seek to preserve and defend their beliefs and tendencies that they have formed, while individuals adopt social motives to enhance and form knowledge and trends that meet immediate social goals. H.7: The trends resulting from in-depth processing are generally more stable, more resistant to counterarguments, and more predictive of future behavior than inferential processing; This difference in stability, resistance, and predictive behavior is likely due to a difference in the structure of trend formation.

## References

Ajzen, I. (1999). Dual-mode processing in the pursuit of insight IS do vice. *Psychological Inquiry, 10(2).* , P110 .

Alexander Todorov, S. C. (2002). *The heuristic-systematic model of social information processing. In James price Dillard& Michael PFau (Eds.). The persuasion handbook: developments in theory and practice.* . California: sage publications .

Aumer-Ryan, P. (2009). *Information triage: Factors affecting credibility judgments of web-based resources. Technical Committee on Digital Libraries, 5(3). Available online at* . Retrieved from www.leee-tcdl.org. .

Borah, P. (2011). Seeking more information and conversations: influence of competitive frames and motivated processing. . *Communication Research, 38(3), available online at sagepub.com* , pp303-325. .

Chaiken, S. (1980). Heuristic versus Systematic Information Processing and the Use of Source versus Message Cues in Persuasion. . *Journal of Personality & Social Psychology, 39(5),* , pp752-766. .

Chaiken, S. C. (1999). The heuristic-systematic model in its broader context. *In Shelly Chaiken& Yaacov*

*Trope (Eds.). Dual-Process Theories in Social Psychology. (New York: the Guilford press, ).Available online at googlebooks.com*, p74.

D. Eric Boyd, K. D. (2009). When do large product assortments benefit consumers? An information processing perspective. . *Journal of Retailing, 85(3)*, P290 .

Khalifa Hassan Khalifa, H., Samir, R., & Ebrahim, M. (2021). Uses and Gratifications of YouTube Platform Among Young Children in Bahrain. International Journal of Media and Mass Communication, 03(02). https://doi.org/10.46988/ijmmc.03.02.2021.07

Erin Seekamp, C. C. (2010). A mixed methods approach to measuring depth of group information processing in the context of deliberative public involvement. *Journal of Mixed Methods Research, 4(3),* , P225. .

Goh Say Leng, S. L. (2011). An Exploration of Social Networking Sites (SNS) Adoption in Malaysia Using Technology Acceptance Model (TAM), Theory of Planned Behavior (TPB) And Intrinsic Motivation. . *Journal of Internet Banking and commerce Vol.16,No.2*, p5.

Khalifa, H. K. (2018). The Role of Satellite Channels and Internet in Shaping Egyptian Public Opinions' Attitudes Toward the Political and Legislative Institutions. Faculty of Mass Communication, Cairo University. Cairo.

Joseph F. Brazel, C. P. (2004). Electronic versus face to face review: the effects of alternative forms of review on auditors' performance. *The Accounting Review, 79(4)*, p952 .

Kenneth S. Bordens, I. A. (2012). New York: psychology press, 2nd edit). p. P215 .

Kurt Neuwirth, E. F. (2002). Person-effects and heuristic-systematic processing. . *Communication Research, 29(3).* , Pp322-324.

Maheswaran., J. M.-L. (2004). Exploring message framing outcomes when systematic, heuristic, or both types of processing occur. . *Journal of Consumer Psychology, 14(18& 2).*, P166.

Michael Chattalas, T. K. (2008). The impact of national stereotypes on the country of origin effect: a conceptual framework. . *International Marketing Review, 25(1).* , P66.

Ngai., Y. Y. (2011). Conceptualizing electronic word of mouth activity: an input-process-output perspective. . *Marketing Intelligence& Planning, 29(5).* , p500 .

Hussein Khalifa Hassan Khalifa (2022). Drama's Violent Scenes and Their Social Impact on Egyptian Youth. International Journal of Media and Mass Communication, Vol.4, No.1, P103-111, DOI: 10.46988/IJMMC.04.01.2022.007

Pan., J. R. (2010). Ethical Judgments in Business Ethics Research: Definition, And Research Agenda. . *Journal of Business Ethics, 91(3).*, pp411-412 .

Robert J. Griffin, K. N. (2002). Linking the heuristic-systematic model and depth of processing. *Communication Research, 29(6).* , Pp706-707.

Robert J. Griffin, K. N. (2002.). Linking the heuristic-systematic model and depth of processing. . *Communication Research, 29(6).* , P706.

Roger Giner-Sorolla, s. C. (2002). Validity beliefs and ideology can influence legal case judgments differently. *Law& Human Behavior, 26(5).* , p521 .

Khalifa, H., Al-Subaie, I. (2022). Uses and Gratifications of Social Media Platforms during COVID-19 Pandemic among Bahraini University Students. The Egyptian Journal of Media Research, 2022(78), 339-365. DOI: 10.21608/ejsc.2022.229366

Serena Chen, K. D. (1999). Motivated Heuristic and Systematic Processing. . *Psychological Inquiry, 10(1).* , p44 .

Shelly Chaiken, A. L. (1989). Heuristic and systematic processing within and beyond the persuasion context. In James S. Uleman& John A. Bargh (Eds.). Unintended Thought. . *(New York: Guilford press*, P235

Shelly Chaiken, K. L. (1999). When parsimony fails. . *Psychological Inquiry, 10(2).* , p118.

Hussein Khalifa Hassan Khalifa, Media Dependency during COVID-19 Pandemic and Trust in Government: The Case of Bahrain, International Journal of Management, 11(11), 2020, pp 329-336. http://www.iaeme.com/IJM/issues.asp?JType=IJM&VType=11&IType=11.DOI: 10.34218/IJM.11.11.2020.032

Shelly Chaiken, K. L. (1999). When parsimony fails. . *psychological Inquiry, 10(2).* , p119.

Shrum., L. (1999). Television and persuasion: effects of the programs between the ads. . *Psychology& Marketing, 16(2).* , P130 .

Turgeon, M. (2000). Just thinking: attitude development, public opinion, and political representation. . *Polite Behave, 31.* , P356 .

Vohs., R. F. (2007, October 03). Encyclopedia of Social Psychology. Online pub. Available online at sage publications.com .

Wyner., S. W. (2011). Designing and theorizing the adoption of mobile technology-mediated ethical consumption tools. *Information Technology& People, 24(3).* , pp261-262 .

Xin Robert Luo, W. Z. (2013). *Investigating phishing victimization with the Heuristic-Systematic Model: A theoretical framework and an exploration. Computers & Security, 38, p29. Available online at*. Retrieved from www.sciencedirect.com.

Zhiming Liu, L. L. (2012). Determinants of information retweeting in microblogging. *Internet Research, 22(4).*, P447 .

Khalifa, H. K., & Ahmed, M. S. (2020). The social responsibility of talk shows on Bahraini Television in dealing with the legislative authority's performance. Journal of Mass Communication Research, 54(54- Part 6), 4035-4090 Doi: 10.21608/jsb.2020.110288.