

Sense-making Approach in Determining Information Seeking and Usage: Case Study in Health Communication

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ABSTRACT

Communication research view communication as a process of transferring information from the source to the receiver to influence an individual's behavior. The focus of past research have been on the transmission of information involving the media and not on the relevancy of information needed by individuals. The aim of this research is to study communication as information seeking efforts. Therefore, one of the objectives of the research is to look at factors influencing the needs and usage of health communication among the public. The research utilizes the sense-making approach as its theoretical framework. In general, the research indicates significant relationships between situational factors and efforts toward fulfilling information needs and information seeking. The research findings differ from the traditional communication research approaches which mostly focus on the effect of information on individuals. This research strongly indicates that individuals who face a health situation will actively seek relevant information to overcome their health predicaments.

Keywords: *Sense-making, health communication, information seeking, media, behavior*

Introduction

Many communication studies view communication as a process of transferring information from source to receiver with the intention of influencing an individual. Based on this assumption, the main focus is the transfer of message involving channels and media and not the quality of information received by the individual involved in the communication process. Several studies suggest that communication should be viewed as human behavior and focused on the individual or humans involved in communication (Grunig, 1972; Dervin et al., 1981, 1983). Information seeking is an important concept in mass media studies which attempts to explain how and what the motivating factors are which influence individuals when seeking information. Previous studies indicated that many scholars had the tendency to focus on the characteristics of the target audience, the information itself and the individual situational context (Dervin, 1983, Thomas, 2006 and Corcoran, 2007).

Research on information seeking states, how and what are the motives of an individual when selecting certain types of information. It is suggested that individual seeking information for a variety of reasons should have an existing attitude and opinion to equip themselves with information for future interaction and with current issues as well as to reduce uncertainties (Atkin et al., 1990). This is because relevant information related to an individual situation (Donohue et al., 1974) will close the gap between current situation and reality (Atwood, 1980 and Dervin et al., 1981, 1983). Sense making approach proposes that when individuals are experienced, they will seek information to enable them to get out of their current predicament. If the situation of the individual is unique, information seeking is a good predictor for the individual.

In fact, a number of studies have found that the individual situation is a good predictor in information seeking compared to variables such as gender, age, income, education and race (Dervin et al., 1981; Atwood and Dervin, 1981). Apart from that, an individual will not pay attention to information unless it is relevant to him/her. The information must be relevant to an individual before he/she decides to pay attention to evaluate and use it. Information that is considered not relevant to self and family and other close friends will be ignored. This behavior according to du Pre (2004), Thomas (2006) and Corcoran (2007) is due to the fact that everybody has different problems and health issues at varying times. This is because the target audience has individual choices and is

psychologically able to choose and expose themselves to a situation where they would accept or remember a message from the mass media.

Based on the above scenario, it is assumed that if an individual is afflicted by a disease or has some health concerns, he/she will be more compelled to seek information. At that level, an individual should be discerning when seeking information, know about information providers and know how to access the information to enable him/her to acquire the information accordingly. This goal will not be achieved if needs and objectives as well as barriers are not identified earlier. Therefore, the problem of this study is to identify the main factors that motivate individuals towards information seeking activities and consequently examine the relationship between information seeking and needs, fulfillment and utilization of health information on behavior modification.

Objectives

The objectives of study are as follows:

1. To identify the situation among the public towards existing public perception towards healthcare.
2. To determine information needs information-seeking efforts and utilization of information among members of public pertaining to health care.
3. To investigate determining factors (psychological and barriers) that motivate the information seeking of health information.
4. To investigate in a relative manner, the salience of a category of variables that encourage information seeking.

Sense Making

Dervin's Sense Making Theory (1989) states that sense making is applied with four elements i.e a particular situation at a particular time and a gap which means when a problem arises, a gap is identified as the difference between the existing situation and an ideal situation, outcomes, effects of sense making, a bridge and some fillers to close the gap between the situation and the outcome. The strength of Dervin's model is in the methodology especially in the relationship between behavior and information seeking whereby this model guides us in examining the

situational problem and the level of information use to reduce uncertainties, confusion and the type of outcome as a result of information use.

This model has also been consistently used in micro time, based on the time limit for interviews with indicators of interview questions which is very helpful in providing information service and disseminating information. For the purpose of this study, the researcher used the information seeking model that was introduced by Brenda Dervin known as Sense Making Information Seeking model. This is a generic model explaining the behavior of information seeking among members of the public. Dervin (1989) introduced four constructs in information seeking, namely situation, gap, bridge and outcome.

According to Dervin (1992, 2003) when a person is faced with an uncertainty in making a decision or how to solve a problem due to the absence of information (gap), he/she will look for a way to bridge the gap (getting information) which usually results in an outcome. In her model information seeking, Dervin proposes four attributes namely situation, gap, bridge and outcome in the information seeking process in order to make a decision or to reduce uncertainties. The behavior of information seeking can be clearly explained through this model. For instance, if a person is suffering from heart problem (situation) but does not have the information on how to cure the ailment (gap), the individual will seek relevant information from various sources such as the mass media, Health Ministry, shaman (witch doctor) friends (bridge) to enable him/her to cope with it or practice a healthy lifestyle (outcome).

Sense making has seven characteristics

1. People enact the environments they face in dialogues and narratives (Bruner, 1991; Watson, 1998; Currie & Brown, 2003). As people speak, and build narrative accounts, it helps them understand what they think, organize their experiences and control and predict events (Weick, 1995).

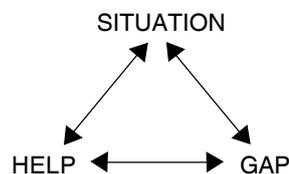


Figure 1: The Sense-making Triangle: Situation–gap–help
(Source: Dervin 1992, 69)

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2. Retrospection provides the opportunity for sense making: the point of retrospection in time affects what people notice (Dunford & Jones, 2000; Abolafia, 2010), thus attention and interruptions to that attention are highly relevant to the process..
3. Sense making is a social activity in that plausible stories are preserved, retained or shared. However, the audience for sense making includes the speakers themselves (Watson, 1995) and the narratives are ‘both individual and shared...an evolving product of conversations with ourselves and with others’ (Currie & Brown, 2003: 565).
4. Sense making is ongoing, so Individuals simultaneously shape and react to the environments they face. As they project themselves onto this environment and observe the consequences they learn about their identities and the accuracy of their accounts of the world (Thurlow & Mills, 2009). This is a feedback process, even as individuals deduce their identity from the behavior of others towards them; they also try to influence this behavior. As Weick argued, “The basic idea of sense making is that reality is an ongoing accomplishment that emerges from efforts to create order and make retrospective sense of what occurs” (Weick, 1995).
5. People extract cues from the context to help them decide on what information is relevant and what explanations are acceptable. Extracted cues provide points of reference for linking ideas to broader networks of meaning and are ‘simple, familiar structures that are seeds from which people develop a larger sense of what may be occurring.’ (Weick 1995: 50).
6. Identify and identification is central – who people think they are in their context shapes what they enact and how they interpret events (Currie & Brown, 2003; Weick,; Thurlow & Mills, 2009; Watson, 2009).
7. People favor plausibility over accuracy in accounts of events and contexts (Currie & Brown, 2003; Abolafia, 2010): “in an equivocal, postmodern world, infused with the politics of interpretation and conflicting interests and inhabited by people with multiple shifting identities, an obsession with accuracy seems fruitless, and not of much practical help, either” (Weick, 1995: 61).

Each of these seven aspects interacts and intertwines as individuals interpret events. Their interpretations become evident through narratives – written and spoken – which convey the sense they have made of events (Currie & Brown, 2003).

Sense-making approach assumes that reality is subject to changes, never permanent, incomplete, and always filled with gaps. This approach also assumes that information does not exist in a vacuum; in fact, information will only be meaningful when it is given meaning. Information is meaningless if humans do not translate it into reality based on their intelligence and wisdom. Humans determine the need for information depending on time, gap and situational factors. The researcher used the sense making model because it is pertinent to know the extent of information seeking behavior in order to help individuals overcome the information gap. This serves as a variable to measure the utilization of information which tends to change from time to time. According to this model information seeking is a dynamic process, ever changing. Although individuals are perceived as static, they are able to process, receive or reject information that is not relevant to their present situation.

Focus Group Discussion

Focus group discussions were used for the purpose of data collection on the health situations of individuals, barriers and psychological factors influencing health information seeking. Sense making requires the researcher to acquire the actual feel of the situation of the individual's state of health. According to Meriam (1998), the constant comparison method is used to develop grounded theory. Although grounded theory is not an actual theory, it sets the foundation for proposing categories and dimensions and determining the relationship among the categories studied. This technique does not require comparing every element. Instead it focuses on comparative themes, categories and relationships based on problem statements and research questions.

Sampling Procedure

Theoretical sampling was used in this study assisted by a selection based on identified criteria. In addition, purposive sampling is where a certain sample is chosen because of its ability to provide massive information which enables the researcher to come up with detailed and in depth responses to the problem statement and research questions. In this study, health information seeking by an audience was chosen for the purpose of filling the knowledge gap in this particular area. This is because the phenomenon related to health communication issues has not really been

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studied in a qualitative manner. Many of the health communication studies generally focused on the use and effects of media but not on how an audience interacts with the media. This focus justifies the unique sampling chosen as the method of sampling which is based on the uniqueness of location, target audience, time and event. This sample selection technique was chosen since it is rarely used (Merriam, 1998).

Informant Selection

The informants for this study were selected using purposive sampling but under maximum variation and through critical sampling. Maximum variation sampling means although the sample is small, it is selected with varying characters, thus yielding a variation of results (Merriam, 1998) this study selected those who were 30 years and above since they are perceived as being matured, generally employed and possess high school certificates. Moreover these informants are perceived as being concerned about their health and have been exposed to the Healthy Life Style campaign that was launched in 1990. At this particular age range, the informants have their own insights on their health care and health practices.

Ethnicity was a criterion for sample selection since the bulk of Malaysian population is made up of the Malays, Chinese and Indians. These three ethnic groups make up the major components of Malaysian society with their own beliefs, norms and values towards how one should take care of one's heart. Thus, socio-cultural differences should be able to exhibit the types of involvement for those involved in the Healthy Life Style campaign.

A pilot study using the focus group method and an actual fieldwork was conducted by the researcher himself. The themes and main focus of this study were used as the protocol for the interview. They are as follows:

1. To observe the individual experience pertaining to health care in the society
2. To examine barriers to health care.
3. To identify the sources that can provide health information.
4. To investigate the needs, information seeking and utilization of health information among audience.

The questions discussed during the focus groups were based on the main themes which were:

- a. Based on your experience, what are the common health problems that you face?
- b. What are the causes of your current health problems?
- c. In your opinion what are the factors which contribute to your health problems?
- d. What types of health information do you need?
- e. What information are you looking for in relation to your current health problem?
- f. What and who do you refer to in order to get health information?
- g. What are the barriers you encounter in searching for health information?
- h. How does the information gained help you to deal with your current health problems?

Background of Focus Groups

Focus Group One

This group consists of four male and four female participants from the Malay ethnic group. Their ages range from 30 to 53 years old. They are mainly professionals and management staff in the government and private sectors. Informants mainly reside in Shah Alam and Subang Jaya and are married with families and live in their own terrace or bungalow houses. Their incomes range from RM3,500 – RM8,000.

Focus Group Two

This consists of four Malay female informants and four Chinese females. They live in Kuala Selangor but work in Kelang and Kuala Lumpur. They are mainly businesswomen and also work for the private sector. The informants' ages are between 30-45 years old. They are married and their income range is RM2000 – RM4000 per month.

Focus Group Three

This group consists of 10 participants who are 50 years old and above. Three of them are Malay housewives, three Indian housewives and four retired Malay men. All the Malays live in their traditional villages while the Indians in an estate in Ijok, Kuala Selangor, Selangor. All of them do not have any regular income but receive money from their husbands or pensions monthly.

Focus Group Four

This group consists of nine males: four Chinese males, two Indian males and three Malay men. They work in the government and private sectors as support staff with incomes between RM1500 and RM2500 per month. They are between 30-45 years old. They rent their houses and live in low or medium-cost houses in housing estates around Kelang, Selangor.

Results

Individual Health Situation

With regard to their health situations or problems, all informants in all the focus groups cited their respective health problems. Most of them suffer from more than one ailment including one high risk ailment that needs to be monitored at all times. For the women, the common ailments among them are joint pains, breast cancer, cervical cancer, headaches, migraine, high blood pressure and diabetes. Among the male informants, common health woes are high blood pressure, heart problems, diabetes and joint pains. Those aged 30-40 years old are mostly affected by headaches, stress, fever, influenza, cough and chest pains while those aged between 40-50 years old generally *suffer* from gout, cancer, heart attack, high blood pressure, asthma, problems with nerves and joint pains.

For those 50 years old and above, they feel tired most of the time and suffer from joint pains, heart disease, high blood pressure and diabetes. Interestingly, this study found four people namely two women from Group One and two Chinese women from Group Two who do not suffer from any critical illnesses. They only experience the normal fever, cough and flu. Evidently, they practice a healthy lifestyle through regular exercise, a good diet and abstinence from smoking.

Causes of Health Problems

All informants were questioned if they knew the cause of their health problems and all answered that they knew the root cause of their problems. Among the causes are those related to an unhealthy diet which contains high fat, salt and sugar content. Some cited fatigue and long working hours. Other reasons include lack of exercise, obesity, heredity, smoking, age factor and the general process of aging.

Information Needs

This study is based on the assumption that the health situation corresponds with the information needs of the informants to overcome their health problems. This study found that the information was needed in order to address the issue of curing the illness, prevention from further spread, symptoms or effects of illness, medicine needed, available clinical treatment, alternative treatment, the actual cause of the illness, who can help cure their illnesses and information from people who have had the same illness. They also want to know the stage of the illness and the information on how to prevent the illness.

Sources that Can Provide Information

The analysis on sources that can be trusted to provide information needed by the informants revealed that most of them selected government doctors, followed by *bomohs* (witch doctors), specialists, and private doctors, those who have experienced the illness, the Internet and mass media.

Information Seeking

All the informants are searching/usually search for the information that fulfills their needs. Overall information search is focused on the prevention of illness and its progression, required treatment, alternative treatments through massage, *bekam* or *guasa*, information on the causes of the illness and information provided by doctors. Other information search is on the symptoms of the illness and its effects, information from survivors of the illness, anybody who can heal the illness, reading materials or references on further information, types of medicines, survival rate, correct exercise and diet.

Information Utilization

Informants from groups 1, 2 and 4 cited that the information acquired helped in controlling their illnesses. The information also relieved their anxiety and sufferings, lessened their stress and was able to calm them down. The information acquired managed to help them be vigilant about illnesses. Illnesses can also be detected earlier with the information acquired so that preventive measures can be taken.

Implications

Based on the eight themes organized through verbatim construction from the focus group discussion, several salient points have been identified:

1. Various health situations and illnesses experienced depend on how we take care of our health or conduct preventive measures. An individual health condition determines the need for health information seeking. Hence, for the campaign planner it is essential to first analyze the individual's state of health before embarking on a health campaign. The effectiveness of a campaign is not only determined by the information provided but also, more importantly, by the extent of how the dissemination of the information helps people address their problems. The sense making (Dervin, 1983) approach consists of interconnecting variables such as situation, gap and utility. Situation which is related to space, time and place is relevant to sense making. Situation is also contributory to the existence of gaps. Gaps are reasons identified for information need or questions the audience has, in order to make sense/meaning and changes within time and space. Information utility means helpful information that is beneficial to the individuals in addressing their situation including its utility.
2. Individuals with health problems will try to overcome or escape from their predicament through relevant information seeking. Sometimes the information seeking efforts are fruitful when it is appropriate and the language medium is easily understood. Sometimes the information gathered is not relevant or enough. Barriers are also encountered in information seeking. Information seeking, for those who have high incomes, is not a problem especially when it involves surfing the Internet, consulting a doctor or a health consultant. However, this group of informants faces time constraints due to the demands of their jobs. Meanwhile, those with low incomes face financial constraints, usually do not know how to look for information and do not have access to information seeking.
3. Individuals with illnesses and health problems will always have questions in their minds such as, "How do I overcome my illness? Or 'Where can I get treatment?'" and many others. These are questions that need to be answered in order to provide some sense of calm or relief from the situation currently experienced. The information required concerns details of preventive measures, treatment, causes and alternative treatment. However, this information

seeking changes with present needs. Knowledge about information seeking is essential because many times the information provided by the campaign planner is not relevant. The sense making approach assumes that reality is something that is always changing, incomplete and separated by gaps. This approach also assumes that information does not exist in a vacuum outside of human sense making; in fact, information is only meaningful when it is accorded meaning by humans themselves. Information is meaningless unless humans translate it into reality based on their intellectual capacity. This approach states that information seeking is an activity that enhances meaning and not just a matter of dissemination. People determine useful information based on time, space and situational factor.

Conclusion

Every individual will seek information because they want to close the gap between information and existing knowledge or knowledge required. Information seeking is critical because the individual is focused on relevant information that can be utilized to resolve the current situation. Information required to close the gap is also different based on the time and space factors. This is because information required is based on ‘needs basis’ from time to time to close the information gap in the individual’s life.

In conclusion, behavioral changes related to health involve early planning by observing information seeking factors and beliefs pertaining to health among the audience and their orientation toward health thus determining behavioral modification. Findings of this study are relevant to health communication in its effort to develop a behavioral model which explains how an individual’s health situation affects information seeking behavior and thus develops a need to modify planned behavior. The findings also indicate that behavioral modification must take into consideration situational dimensions and barriers in obtaining information and physical obstacles among audience since these are the determining factors for an individual when trying to decide whether to accept or reject change in behavior.

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