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Psychosomatic Dimensions of Human Communication

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Abstract

This paper looks at the mental processes occurring in the human brain that either enhance or inhibit effectiveness in interpersonal and mass communication. It offers an account on the relationship between perception, cognition and the individual's"frame of reference"as well as their input in meaning construction and deconstruction that result in meaning sharing. The paper maintains that communication essentially involves an interaction between the human mind and the communicator's physical environment. It presents a detailed account of the perceptual processes to which stimuli/information picked by the sensory organs from the environment are subjected in order to construct meaning. The intrinsic ability of the human brain to sift, retain or discard information presented to the sensory memory and the psychosomatic barriers to effective communication are equally discussed. It further highlights techniques news reporters apply to subtly infuse psychological elements in their reports to make the messages more attractive and suggestive to the receivers. The paper affirms that with the use of such techniques that appeal only to the individual's cognitive state, communication is so much of a psychological act just as it is a social phenomenon.

Key words: Perception, framing, barriers, communication, values

Introduction:

Communication is the act of exchanging messages between or among individuals through the use of mutually understood signs and symbols and application of semiotic rules that give meaning to such signs and symbols. The communication process is not fixed but dynamic, reciprocal and cognitive**.** Thus the framework of human cognitive design is helpful in discussing thought and how the corresponding areas of psychology relate to each other along a continuum which in turn relates to human communication processes (Ramaraju, 2012).

Human communication is complex and inherently imprecise given that messages bear different meanings to different individuals who interpret meaning according to the context in which communication takes place and depending on the frames of reference of individual participant. The context ofhuman communication refers to the prevailing environmental and mental conditions. While the physical environment such as the occasion can affect the diction demeanour and interactional synchrony (the relationship between verbal communication and non-verbal cues in message construction and meaning formation), the cognitive and perceptual processes as well as the personality of participants can equally influence meaning construction and deconstruction. These are psychological processes that are not apparent but integral to effective communication. Authorities propose that human communication should therefore be analyzed in terms of the mental states of the individuals such as intentions, beliefs, emotions, values and the cognitive dynamics leading from one mental state to another (Austin, in Higgin & Sermin, 2001). Drawing from this proposition, successful communication is described as a recognition of a specific set of mental states including intention to affect others or the other participant and a higher intention that this intention is recognized (Grice, in Higgin & Sermin, 2001).

When meaning sent equals meaning interpreted, communication has taken place effectively.Yet, this can happen only when the sender is able to assume the right frame of mind to couch the message in the appropriate language or signs. This situation equally applies to the receiver

of the message. A sign or symbol could be seen as a parameter that can take on different values. It is produced by the communicator with a precise aim mostly but subject to misinterpretation by the receiver. Thus credibility or believability of message depends not just on the sender and how he presents his message but largely on the judgement by the listener or receiver. Beebe, Redmond, Beebe and Milestone (1997) represent the meaning production process in communication with a "meaning triangle" which illustrates that "thought" is the idea a person references, the "symbol" is the word that represents the thought while the "referent" is the object or idea the symbol refers to. The symbol or word that represents thought is not always tied to a particular situation, object or idea. It could conjure different meanings in different contexts. This is the reason an infinite number of utterances could be made of a language by connecting existing words in new ways to create new meanings (Crystal 2005).

The essence of human communication, which is both social and cognitive, is meaning sharing. It is social given that it enhances group interactions and provides a means through which individuals influence each other in desired directions**.** Communication is intrinsically seen as a social phenomenon owing to its power to affect the way human beings as individuals or in groups interact. Communication is cognitive because it relates to the thought processes of man on which communication is truly founded. Human communication being psychological merely refers to the state of mind of communicators and how this state of mind aids or inhibits the meaning sharing process.

The main steps inherent in every communication activity are: the formation of a communicative motivation or reason, message composition, reception of signals and reassembling of the encoded message from a sequence of received signals, decoding of the reassembled encoded message followed by interpretation and making sense of the presumed original message.

Elements of the communication message

Of all elements in the communication process, the message is the physical product which the source sends to the receiver. It is the essence of the communication action and bears the intention of the sender/source which is encoded in a form understandable by the receiver. Determining the purpose of the message is the first task of the sender in deciding what to say, how it should be said and what channel is appropriate to communicate it to the receiver. All these steps have influence in the meaning transmission process at one point or the other. In most cases the message could be for the purpose of informing, reminding, persuading, etc. the receiver. Some messages could communicate goodwill while others communicate what is called bad news. Whatever the purpose of a particular message is and the form it takes, the speaker or source has an inherent meaning he intends to share with the receiver.

However, one fundamental problem in communication is that the meaning which is actually received by the receiver may not always be what the sender intended because of the intervening factors which could be physical or psychological. The psychological interventions are treated later in this work. Physical interventions include noise from the physical environment, use of inappropriate communication codes and symbols, improper timing, unsuitable non-verbal cues, etc.

The communication message between the source and receiver always embodies elements such as: intent, expression, impression and interpretation. Intent is otherwise called motive which is the expectation behind the communication behavior. It is related to needs, that is, what the message actively seeks to satisfy. Expression represents what is said or the sign used by the source. Verbal expressions through the oral cavity encompass speeches, utterances, orations, exclamations, questions, calls, etc. Signs include wave of the hand, a raised flag, grimace, shrug, etc. to which the receiver can attach meaning. Impression as a component of the communication message refers to what is heard or how the sign is observed by the receiver while interpretation is the meaning the receiver assigns to what has been said and heard or perceived from the sign.Since communication is a purposeful activity, the source

must have a purpose which has to be expressed for someone to hear or observe and interpret. This expression must be such that meaning could be interpreted from it in order to elicit a response from the receiver. One can communicate amiss if the message appears to be devoid of any of these basic elements.

Perception and communication

While our receptors (our senses) perpetually garner information from the environment, it is ultimately how we interpret that information that affects how we interact with others. Again, as we communicate or interact with other humans, we interpret and attribute meaning to what we observe or experience. We bring together bits of information in our minds/brain about a person, object or an issue and draw conclusion that may or may not be accurate. Because our feelings and responses to other people are based on our perception, those skilled or gifted in observation and interpretation of other people's behaviours and utterances are able to develop effective interpersonal relations through pertinent communication skills given that in communication people make statements with intent on accomplishing some particular social action.

Therefore, to communicate effectively parties involved must consensually perceive the intentions of each other's messages (Albright, Cohen, Malloy, Christ,& Gregg,2004). Perception begins with conversion of sensory stimuli into electrical energy in the nervous system by a charge in the membrane potential (Molnare & Gair**,** 2016).It is all about an individual's ability to capture and comprehend stimuli that our senses pick from the environment. Perception refers to the way sensory information is organized, interpreted and consciously experienced beginning with the collection of data from sense organs and through to the interpretation made by the brain of such data, stimuli or information. On the other hand, how we interpret these stimuli is influenced by our available knowledge or experiences and our thoughts (Simon, 2017).In interpersonal communication, our perception of people involves analysis and interpretation that go beyond mere interpretation of sensory information. It involves judgement about personalities and drawing inferences from observations (Beebe et al., 1997). Creating understanding of how stimuli from the environment interact with our sensory systems forming visual, auditory, haptic, olfactory and gustatory representation of the world that makes sense to us is a function of perception.

Perception is important to communication because it influences the communication choices. The messages one sends and listens to depend on how one sees the world based on information gained from the environment through the senses. In interpersonal communication one's interactions with another are based on how one is able to assess the specific situation and on what one thinks of the people with whom one interacts. The ability to evaluate situation or assess participants in a communication process is solely based on perception (Devito, 2003). This situation points out that one is always likely to communicate amiss if one's perceptual processes are ignored. Interpersonal perception guides interpersonal communication and enables us to decide what someone is like, and gives meaning to his actions by making judgement about his personality and making inferences from what has been observed about him.

Perception involves:(1) Stimulation: This is the stage at which the sense organs are stimulated by stimuli from the environment. This happens every now and then if none of one's senses is impaired. In life, your senses take in an enormous amount of information about what you see, feel, smell, hear, and taste. Your sensory memory creates something of an outline of the world around you, allowing you to briefly focus on relevant details. Thus it engages onselective perception of the stimuli contacted by all sensory organs because it is naturally impossible for one to perceive at the same time all the stimuli on one's way. Selective perception is a general title for selective attention and selective exposure.

Through selective attention, you attend to those stimuli deemed worthwhile, which you anticipate will meet some need or are enjoyable. Through selective exposure, you expose yourself to people or messages that conform to your existing beliefs,

satisfying in some way or contributing to your objectives (Devito, 2003). Through the selectivities your mind deals with the various sensations in a way that allows a few of them to get to the awareness stage using perceptual filters to screen out what it considers less important to you. Directing our attention to specific stimuli and selectively exposing yourself to particular messages, situations or people and ignoring others is called selective perception.

(2) Organizing: after relevant data have been collected, the next perceptual process is to organize them into understandable convenient andefficient patterns that make sense of what has been observed or selected. Organizing stimuli makes it easier for individuals to process complex information because it allows us to impose familiar concepts on unfamiliar ones to create meaning (Beebe, et al., 1997). In other words, the organizing process enables us to use the idea of what we know to give meaning to what is unknown but related to that which is already known. The brain is known to organize information in schemas which are mental templates or structures in which the array of information the brain receives from the sensory organs are separately organized. Schemas are techniques for encoding information in the memory for easy retrieval. The human brain is known to use schemas to organize current knowledge and provide a framework for future understanding (Georgeon & Ritter, 2011). That explains why people can quickly organize new perceptions into schemas and act without effort to recall it when needed (Kleider, Pezdeck, Goldinger, & Kirk, 2008).

(3) Interpretation: after organizing it, you give your perception meaning or you attach meaning to your perception and draw conclusion. This step is inevitably subjective given that it is greatly influenced by your values, beliefs, experiences, expectations, mental state, etc. (Devito, 2003). You rely on the outcomes of your socialization and your recurring experiences to attribute particular meaning to particular stimuli (Beebe et al., 1997).

Attitudes, beliefs, values and communication

It is important as communicators to always examine our attitudes beliefs and values which are integral to effective communication. Though it could be difficult to determine same in others we should note that they collectively have immense influence on human communication. These concepts are learned through interactions with others and are susceptible to changes across our life time. In other words, they are not absolute but conditional. Attitudes are relatively enduring organization of beliefs, emotions and behavioural tendencies towards socially significant objects,groups events or symbols (Hogg & Vaughan, 2005). Attitudes are learned biases towards a concept or object. It could be positive or negative to the referent. Attitudes can changeeasily and frequently upon acquiring further knowledge about the concept, object or another thing related to it.

A belief is the confidence or conviction you have about the truth of some proposition (Devito,2003). It relies on prior experience and conviction which are not always based on logic or fact. Beliefs may not arise from studies yet they are held as important aspects of personality. Though beliefs can change, the process of changing a belief is subject to strong evidence that addresses the existing belief.

Values are core concepts or ideas about what is considered good or bad, right or wrong, acceptable or not. Values are central to self-image and like beliefs they may not rely on results from empirical exercises or rational thinking. Values are more resistant to change unless there is a transformative life experience (Mclean, 2003). They are principles, standards or qualities people hold in high regard that guide their decision making processes. Values commonly develop from beliefs which are internal feelings that something is true (Maise, 2014) and they influence attitudes which arise from core values and beliefs.

Attitudes are either negative or positive towards an object, issue or person. Therefore, if someone has a negative attitude towards something or someone he may not be motivated to fully participate in a conversation about it. This can give rise to misunderstanding because he who has a negative attitude towards the subject cannot be committed or pay required attention that can elicit worthwhile

responses. On the other hand, a positive attitude towards the subject creates empathy among discussants who can participate fully and make effort to provide the best possible responses.

Positive attitudes engender more participation in the conversation, helps maximize strength, minimizes weaknesses and fosters increased interaction among individuals. Negative attitudes cause inability to properly evaluate issues, inability to see problems and results in incompleteness in the communication process. An accumulation of these beliefs, values and attitudes gathered through our interactions with others form our individual "frames of reference" otherwise called field of experience which everybody relies on to evaluate other people's opinions or contribution in communication. Consequently, communicators need to consider each other's value systems in other to communicate effectively (Simons, 2017).

Effective communication is a connection between people made possible by exchange of thoughts, feelings or ideas that leads to mutual understanding. This exchange is initiated by a source who sends a message to be responded to, by a receiver and both parties recourse to their frames of reference for guidance in the process. For effective communication to take place the frames of references of interactants must considerably overlap each other to form a common field of experience. This overlapping of frames of reference is called homophily which is described as a coding oneness that makes for effective communication (Vivian,2003). The essence of homophily is to enhance communication by creating a rapport between communicators to ensure that meaning is shared easily (Ndimele & Innocent, 2006).Values, beliefs and attitudes arise from common experiences gathered from the environment which form the individual's frame of reference that form the basis of perception.

Psychology and mass communication

Mass communication represents a process where a communication system known as the mass media are used to transmit messages to a dispersed and anonymous audience. These media have the capacity to publicly communicate at a distance to many in a short space of time and were identified in the twentieth century as key features of an emerging world characterized by industrialism and democracy (McQuail, 2009). To date, mass media messages continue to tremendously influence the political, cultural, and social lives of individuals and groups in society.

The power of mass media messages is such that they can guaranty the operability of a dictatorship whereas, an incisive mass media is the mainstay of every democracy (Musah, 2017). The ability of mass media messages to successfully serve such antithetical purposes is because, news purveyors subtly apply techniques in their reportage that make messages appeal to the psyche of audience members. In consequence messages from the mass media of communication exert a great degree of influence on individuals' cognition and attitudes. Mass media practitioners succeed in doing this through mechanisms of influence such as agenda-setting which represents a situation where repeated or increased media coverage of an issue leads to increased perception of salience of that issue and makes us to think about it (Moy, Tewksburry, & Rinke, 2016).

Priming on the other hand suggests that as humans receive messages from the mass media related ideas or thoughts stored in the brain are activated. Those thoughts activate others generating a ripple effect in the mind and action tendencies connected to the ideas presented are actuated (Jo & Berkowitz in Meredith, 2013).The notion of priming is built on the assumption that a stimulus received from the mass media can activate previously learned cognitive structures which activate other related structures in succession thereby influencing judgement. In a nutshell, the priming theory suggests that media conjured images stimulate associated schema in a person's memory that aid decision making. The idea of priming relates to the associative networks model which holds that memory consists of an organized network of concepts or nodes linked through

associative pathways. The associative network model is the dominant framework that explains cognitive social psychology for understanding human information processing and judgment (Brewer, Graf, & Willnat, 2013).

A frame is described as a central organizing idea for news content that supplies a context and suggests what the issue is through processes such as selection emphasis, exclusion, etc. (Tanker et al. in Weaver, 2015). It relates to the act of couching the report in a manner intended to influence people's perception of an event or issue through purposeful use of words, phrases, etc. Framing theory suggests that how something is presented to the audience (called the frame) influences the choices people make on how to process the information. Put differently and specifically, media frames are used as cognitive shortcuts to link stories to the bigger picture (Arowolo, 2017) by subtly making the message recipient see the issue from the perspective of the news reporter.

Connecting psychology and mass communication is an attempt to explain how our experiences with mass media messages affect the way we perceive issues and how our perceptions affect our attitudes and behaviours in human communication.

The brain and information processing

The brain is organized to recognize sensations, initiate behaviors, and store and access memories that can last a lifetime (Papas, 2016). Human information processing takes place in the brain and it follows both conscious and subconscious efforts of the human mind and body to gather information. Through some purposeful action one can selectively expose oneself to certain stimuli in the environment but once these received stimuli pass through the sensory organs to the brain, what happens there from is largely subconscious and no longer visible to the human eye but understandable only to neuropsychologists, other experimental biologists and educational psychologists (Wilson, 2006). The first staging post for the stimuli is the memory. Your perceptions and their interpretations or evaluations are put into memory so they could be retrieved for use as the occasion demands. This is an automatic process which humans do not usually give attention to. Every event, no matter how inconsequential, passes through the gateway of memory without the individual noticing how. Nonetheless, most of the occurrences are just passing through the memory and never taking up permanent residence (Papas, 2016).

There are three types of memory among which is the sensory memory: Sensory memory allows people to retain impressions of sensory information after the original stimulus has ceased. It is the first stage of memory that involves registering information about the environment, but only for a very brief period. The purpose of sensory memory is to retain information long enough for it to be recognized (Cherry, 2020).

The short term memory: this is otherwise called working memory or clearing house (Wilson &Itek, 2006). It temporarily stores information when triggered by stimuli. Its storage capacity is limited hence it has a brief duration for information storage. It stores sound, images and words; allows for computation and filters information that either goes to the long term memory or is discarded. Its potency can weaken due to medication, insomnia, stroke or injury in the head. It retains information that we wish to keep for a short period of time.

The long term memory: the most critical of information processing takes place in this memory. Here, information received is encoded in concepts rather than perceptual feature in the short term memory and stored in a network of schemas which then converts into knowledge structures. The long term memory is responsible for encoding storage and retrieval of information. Humans can recall events that happened in their childhood by tapping into the long term memory (Papas, 2013). The configuration of the long term memory and its information storage pattern (concepts and schemas) enables humans to recall relevant knowledge when we stumble on similar information in the environment because it is just a matter of activating the appropriate schema and the needed information is recalled presently. Information received in the long term memory passes through the short term

memory. At this stage and unlike the short term memory, the brain is less likely to forget important details. However, information here can diminish in quality over time if memory is not refreshed. The brain has capacity to explore the same task in different forms which prevent boredom and reinforces that piece of information.

The following are the information processing stages in the brain.

Stage 1 input: The brain is exposed to stimuli received through the sensory organs. At this stage it analyzes and evaluates the information or stimuli for relevance and determines whether it could be stored, discarded, or worth remembering.

Stage 2 storage: The brain stores information for use later. Itencodes and adds such information to our mental schema. However, if the information is not reinforced, the brain may simply forget it over time.

Stage 3 output: The brain decides what is to be done with this information and how it will react to it.

Information processing starts with input from the sensory organs which transform physical stimuli such as touch, heat sound waves or photons of light into electrical signals and thus sensory information is repeatedly transformed by what is called algorithms of the brain in both bottom up and top-down processing. Once information is processed to a certain degree, attention filters decide how important the signal is and which cognitive process it should be made available to.

For information to be processed for use in future, it must first be stored. Then, it is encoded and maintained so it could be retrieved later. Remembering past events entails a process of reconstructing what may have happened based on the details the brain chose to store and was able to recall. Recall is triggered by a retrieval cue which is an environmental stimulus that prompts the brain to retrieve memory. The better the retrieval cues the higher the chance of recalling this memory. Once perceptions are appropriately stored in the memory, they can be easily recalled. Easy recall implies that you may not bother to think of that piece of information itself but the schema in which it is stored and it is presently retrieved for use. Information that are inconsistent with the schemas in the brain cannot be recalled because they had no place of storage in your brain initially; hence they could be lost or forgotten. It is also note-worthy that weak retrieval cues can cause a person to reconstruct memory improperly.

Psychological barriers to communication

Communication barriers are situations that interfere with the factual accuracy of the message that hinder appropriate meaning sharing in the communication process. Some of such barriers which are obvious include physical challenges like deafness. Many others that are less obvious but arise from the mental conditions of individuals are called psychological barriers. They include:

Attitudes and values: Attitudes are pre-learned dispositions that are closely linked to a person's beliefs and value system. Whether your attitude is negative or positive can affect the communication process accordingly. For instance, if one's beliefs and values about a subject of discussion is threatened one is likely to be ill disposed to the message and would not pay required attention to the message. One's possible response to the message, if any, would be slanted.

Negative self-image: This can affect the communication process through either the source or the receiver. When a source is pessimistic about his self-worth in relation to that of the receiver's social status, he may judge himself lacking the capacity to convince him (Kapur,2018). This low self-esteem inadvertently affects the phrasing of the message which can cause the receiver to draw inferences that should not be part of the intended meaning.

Emotions: Positive emotions such as love shared between communicators can enhance meaning sharing though excitement may distort meaning. Conversely, anger and hatred can block the mind from the positive aspects of the message thereby causing misinterpretation of meaning. Effective communication requires an even mindset but strong emotions that are not kept in check can cause

miscommunication.

Premature evaluation: When a message recipient is not patient enough to get the whole message before evaluating it, he ends up blocking other parts of the message that would contribute to completeness of the meaning. Premature evaluation breeds wrong judgement because the receiver assesses just part and not the whole message to derive meaning.

Distrust and defensiveness: Communication is effective when parties have trust for each other. When the receiver is biased or hostile towards the source of the message, the message is either ignored in part or misinterpreted in a manner that is defensive of the receiver's viewpoint. The receiver may also interpret meaning according to assumptions that may not be true but reinforces his inclination.

Implications and Inferences

An implication is a meaning derived through connotations which are founded on reasoning rather than through specific details. An inference is a conclusion drawn from connotation rather than from specific details. A communicator who implies something can cause a receiver to infer a meaning different from what was intended. We may expect our inferences to be correct always, but they may prove incorrect due to some unpredictable interventions. As inferences go beyond the facts in making certain statements,wrong impressions are produced.

Conclusion

For communication to take place, the human five senses interface between the brain and the environment. They receive information or stimuli from the environment and transmit same to the brain which processes it and uses valuable bits to formulate thought.The brain also draws from information already stored in the memory and the emotions of the individual in this process. These thoughts are either expressed or safe-kept for use later when they are encoded in an appropriate form understandable by a receiver. The values, beliefs and attitudes of individual communicators inevitably impinge on this process and if there is no considerable alignment between the value systems of interactants, psychological barriers interfere with the fidelity of the message.

Psychological barriers affect communication because message formation and encoding are rooted in the brains of humans whose psychological configurations change from time to time. Messages constructed or encoded in the right psychological state are likely to have intact everything that makes communication effective. The psychological condition of the receiver also has to be in good shape to appropriately interpret meaning. Communication becomes ineffective when unsuitable psychological conditions of the communicators act as barriers because communication can only be as effective as the people involved make of it.

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