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HUMAN INFORMATION PROCESSING AND DIFFUSION

Research on human processing and diffusion of information, undertaken by scholars from a number of academic fields, has resulted in a number of independent theories. There has been little attempt to integrate this body of research and theory. It will be the purpose of this essay to attempt such an integration and to suggest, as far as possible, the practical implications of this material for the communicator.

The Nature of Information and Its Diffusion

A MATTER OF DEFINITION

The term "information" is a part of almost everyone's vocabulary. In a sense, we all know what it means. But in another sense, the meaning of the term is most unclear. Engineers have reduced the definition to a mathematical formula, but for our purposes such a definition is inadequate. We shall define information as "knowledge about objects and events and about the relationships between objects and events."

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"Knowledge" is a mentalistic term, and its use suggests a humanistic limitation of our definition of information. Knowledge cannot exist on its own. It only exists within the minds of people. Information, therefore, also exists in the minds of humans. When we say we wish to "communicate information" to another individual, what we are saying is that we wish to create knowledge about objects or events or about relationships between objects and events in the mind of the other person. We may accomplish this with verbal descriptions of the object or event, we may accomplish it nonverbally by bringing the other individual into proximity with an object, or we may employ both verbal and nonverbal means.

People also acquire information without the assistance of other people. If I walk into a room and see a wall, I can acquire information concerning the color of that wall by observation. The crucial thing to remember is that the acquisition of information is dependent upon mental associations within the individual acquiring the information. These mental associations may be stimulated by something in the external environment, or they may be stimulated either partially or exclusively by the internal state of the individual (thinking). Thus, information is acquired in some instances by an interaction of external stimuli and internal associations, and in other instances by purely internal associations.

It should be noted that at no point have we included the concept of "reality." Some people prefer to restrict the definition of information to "correct" perception of the external world, but such a restriction is unwarranted. If I walk into a room and look at a wall and perceive it to be painted gray when "in reality" it is painted green, I have nevertheless acquired information about the room, albeit incorrect information.

Defining "diffusion" is less difficult. Diffusion is the process of communicating information to other people. For diffusion to occur, at least one person must have acquired the information, and that person must be motivated by a desire to have other people acquire that information. It is important to consider for a moment the motivation for diffusion. Information seldom exists in a static state in an individual. Rather, information has a direct relationship to human behavior. To a large extent, we may be able to predict human behavior on the basis of the information which the individual has acquired. To diffuse information, therefore, is to influence behavior. In most instances the motivation which prompts diffusion of information is the motivation to modify human behavior. Diffusion of information, therefore, is closely related to the process of persuasion, which will be discussed in the next chapter. Although we will not consider persuasion further at this time, the close relationship between the material discussed in this and Chapter 5 should be kept clearly in mind while reading both.

LEARNING THEORIES AND INFORMATION PROCESSING

The process of acquiring information is referred to as "learning." Thousands of experimental investigations of this phenomenon have resulted in several theories concerning how people learn, or acquire information. Two of these theories—conditioning and reinforcement—are particularly helpful for our purposes.

CONDITIONING. The work of Ivan P. Pavlov (1927) provided the foundation of conditioning theory. For Pavlov and other conditioning theorists, the basic process in learning is the formation of an association between a stimulus and a response because of their contiguity. Pavlov's research provides an example. Salivation is a natural response in dogs. In time a dog naturally learns to salivate when food is brought near him, although originally he salivated only when eating the food. He can then be taught to salivate in the presence of stimuli other than food, through the process of conditioning. Pavlov taught dogs to salivate in the presence of a ringing bell (stimulus), by ringing a bell on several occasions as food was brought before the dog. At the outset the dog would salivate because of the presence of food, but after a period of time he would salivate merely at the ringing of the bell, even if no food were present.

Humans also can be conditioned. A natural response in humans is for them to relax. The reverse response, a state of tension, is also a natural response. Which response will be made by an individual depends on what type of stimulus is present. This difference in human response may be compared to Pavlov's dogs: These dogs had two natural responses, to salivate and not to salivate, and which response was evoked depended, initially, on whether food was present. The conditioning of the dogs involved artificially inducing salivation in the presence of a stimulus that would not ordinarily produce salivation. A comparable technique has been used with humans to help them overcome debilitating anxiety. This technique, a behavior therapy referred to as "systematic desensitization," involves generating a relaxation response in people and then introducing a stimulus that would normally cause them to be tense and nervous. With repeated exposure, the individual is conditioned to respond with relaxation in the presence of a stimulus that previously would have produced tension.

The crux of conditioning theory is the relationship between stimulus and response on spatial and temporal dimensions. We learn that cloudiness and rain are associated, because it rains while it is cloudy and does not rain while the sun is shining. Much of our elemental learning can be explained by this process of conditioning.

REINFORCEMENT. Edward Lee Thorndike (1898, 1932) was the founder of reinforcement theory. He and his followers, particularly C. L. Hull (1943) and B. F. Skinner (1938, 1948), have assumed a dominant place in contemporary learning theory. The essence of reinforcement theory is that when a connection between a stimulus and response is made and this connection is followed by a satisfying result, the connection between the stimulus and response is strengthened. The important variable is reward. In short, organisms learn that which is rewarding and fail to learn that which is not. Thus, if a child raises his hand before he speaks in a classroom and is complimented for that by the teacher, he is likely to learn to raise his hand before speaking.

While learning theories are helpful in understanding human processing of information, there is an inherent problem with learning theory. Learning theory is the product of learning researchers—and these individuals, for the most part, have been rigid behaviorists. To them, "information," as we have defined it, would be meaningless. Their concern is whether or not the dog salivates or the child raises his hand, not what the child "thinks" or what the child "knows." A learning theorist would be likely to say that we know that a person has learned only when he behaves in such a manner that we can hypothesize that he must have learned in order to behave in that way. Most of the theory and research concerning learning which is based upon the conditioning and reinforcement traditions is highly mechanistic, not mentalistic. The theory does not depend upon "thinking" by the human who is learning. Nevertheless, it is possible to extrapolate from these theories and the mass of research which has supported them and to draw some conclusions about how humans acquire information.

If we assume that all living organisms seek desirable conditions for themselves and that man is not unique in this regard, we can describe human acquisition of information as the process of observing stimuli, relating those stimuli to previous information, determining whether or not the stimuli can increase the desirability of conditions for the individual, and either storing or discarding the stimuli from the memory. This procedure suggests that the individual engages in considerable selectivity in processing his information. This hypothesis is born out by considerable research.

SELECTIVITY AND SCREENING IN INFORMATION PROCESSING

Because of the monumental number of stimuli that are constantly bombarding the individual, it almost goes without saying that the individual must select from all of these stimuli those to which he will attend and which he will process. While no two individuals are quite alike, re-

search suggests four tendencies among people which affect the way that they select information for processing. It should be stressed that these are *tendencies*, rather than universal responses of individuals. While research has indicated that these tendencies exist, there is as yet insufficient information to describe precisely when they dominate a human's reactions.

Two bodies of theory have been drawn upon to explain how this selectivity comes to exist. The first is reinforcement. Briefly stated, the theory suggests that people will process information that promises to be rewarding, and that they will avoid selecting information which does not promise a reward. Another body of theory, often referred to as "consistency" theory, is also employed to explain selectivity. This theoretical position will be discussed further in the next chapter; but, briefly, consistency theory suggests that when an individual's cognitions are inconsistent, he will seek new information to resolve the inconsistency. This theoretical position also suggests that individuals will tend to avoid processing information which will create inconsistent cognitions.

The four tendencies in selectivity that lead to screening of information are selective exposure, selective attention, selective perception, and selective retention.

SELECTIVE EXPOSURE. Reinforcement theories suggest that people seek reinforcement for their attitudes, beliefs, values, and behaviors. Consistency theories suggest that people try to avoid a state of inconsistency such as would exist when information would be incompatable with prior or present behavior. Thus we should expect that people would seek information which is consistent with their own attitudes, beliefs, values, and behavior. The converse of this is that people will avoid conflicting information. Considerable research indicates that our expectations are correct (see Mills, Aronson, and Robinson, 1959). This tendency in people has been referred to as "selective exposure," by which is meant that people selectively expose themselves to information on the basis of whether they consciously or unconsciously believe that the information will be reinforcing. This tendency has important implications for communication behavior. We should expect people to seek interaction with other people whom they believe will provide consistent information. Similarly, usage of the mass media should be expected to be affected by this tendency. We should expect people with liberal tendencies to read the *New Republic* and people with more conservative tendencies to read the *National Observer*. Such choices would enable the individual to be reasonably assured that in most instances he will receive information that is consistent and reinforcing, rather than the reverse.

While this tendency in human processing of information has been observed in several research studies, it must be stressed that it is only a

tendency. Researchers have not observed instances where everyone behaved in a manner consistent with such a tendency, and in some cases little or no trace of selective exposure has been found. Nevertheless, the tendency often is present and has an important bearing on the way humans process information (see Elihu Katz's article in this chapter).

SELECTIVE ATTENTION. Although people tend to avoid exposure to information which is inconsistent or unrewarding, it is not always possible to avoid such exposure. When exposure to inconsistent or unrewarding stimuli occurs, there is a tendency to pay selective attention. This is the tendency for people to pay close attention to information that is consistent with their attitudes, beliefs, values, and behaviors, and little attention to stimuli which are inconsistent (Gilkinson, Paulson, and Sikkink, 1955).

Of course, all attention is, in one sense, selective. Everything in our perceptual world makes some demand upon our attention. This maze of stimuli permits the operation of selective attention in the sense that we are discussing it here. Selective attention is not so much the conscious "tuning out" of inconsistent information as it is the unconscious "tuning in" of consistent information.

SELECTIVE PERCEPTION. Obviously, it is impossible always to avoid paying attention to nonreinforcing or inconsistent information. Some such information will be attended to. However, this does not mean that the individual necessarily will perceive that the stimulus is inconsistent. Research suggests that there is a tendency for people to perceive selectively what stimuli actually mean. We may see what isn't there, or we may fail to see what is there (Cooper and Johoda, 1947). People tend to perceive what they want to perceive or what they expect to perceive, whether or not such perceptions are in accord with what other people might consider reality. For example, a study was conducted, in which three messages with regard to bussing students to maintain racial balance in schools were variously attributed to the late Martin Luther King and Governor George C. Wallace of Alabama. One was a strongly worded message in favor of the bussing, one was clearly opposed, and one was a moderate statement expressing both favorable and unfavorable views about bussing. When the moderate position was read by college students, it made a considerable difference whether it was attributed to King or Wallace. Because the students expected King to be for bussing and Wallace to be opposed, the same message was perceived to be strongly supportive of bussing when attributed to King but to be strongly opposed to bussing when attributed to Wallace (Arnold and McCroskey, 1967). Thus, attention to stimuli does not guarantee that the stimuli will be perceived in accordance with what we might call "reality."

SELECTIVE RETENTION. Even though stimuli may survive the three preceding selective tendencies, there is still no assurance that they will be retained by the individual for any period of time. There appears to be a tendency for people to forget unrewarding or inconsistent stimuli and remember those which are rewarding and consistent (Levine and Murphy, 1954). It appears that humans tend simply to "process out" information that is inconsistent or unrewarding. They may not recall ever having been exposed to that information at any earlier time.

The conclusions from the research on selective tendencies may be summarized as follows: New information which is consistent with prior information or perceived to be potentially reinforcing is likely to be processed by the individual and retained; new information which is inconsistent with present information or is perceived to be potentially nonreinforcing is likely not to be processed or retained by the individual.

SOURCES OF INFORMATION

Although the processes of selectivity and screening prevent us from acquiring much information which we could acquire, all of us do acquire new information. The question thus becomes, How do we acquire information? The answer to that question is both simple and complex. At the simple level, we acquire new information from the mass media, from contacts with other people, and from our direct observation of our environment. Or, to put it another way, we read, listen, and see. But this simple explanation of how we acquire information does not really explain why some information is acquired and other information is not.

Most people assume that if we were to desire to communicate information to a large number of people, the most efficient way of doing this would be the mass media. Research on the effect of the mass media on the acquisition of information provides some support for that assumption, but also indicates that it does not always hold. Briefly, the research suggests that people are very effectively exposed to information through the mass media, but that in many cases the information fails to become internalized The research suggests that the mass media are very effective in informing people about major news events, but have a minimal impact on the acquisition of other information. The research of Deutschmann and Danielson (1960) for example, indicates that 88 per cent of the population of the United States learned of the flight of Explorer I, President Eisenhower's first stroke, and Alaska's admission to statehood through the mass media. This research, and similar studies, lead to the conclusion that the mass media is a very effective instrument for informing the public. But while this may be true of information that is particularly newsworthy, it does not appear to be true of information with less news value. The mass media

seem to be effective in diffusing information when the subject matter is new or relatively new to the receiver (e.g., a major news story), but they seem to have little effect when the receiver already knows quite a bit about the subject.

One of the assumptions that underlies most theory relating to information and attitude is that the acquisition of information will tend either to reinforce or modify attitudes and behavior. Thus, if the mass media is effective in dissemenating information there should be an observable effect on the relevant public attitudes and behavior. The research in this area tends to suggest that often no such effect occurs (Katz and Lazarsfeld, 1955). Simple exposure to the mass media does not necessarily mean that the information provided is internalized by the individual. Rather, it appears that often at least another step is necessary for this to occur. This has sometimes been referred to as the "two-step flow" of communication. By this is meant that one person, often called an "opinion leader," obtains the information through the mass media and then diffuses it to other people with whom he is acquainted. Hence the label, "two-step flow": mass media → opinion leader → person 2. Other research suggests that there may be more than two steps in the process. In short, the concept of a "multi-step flow" may be more appropriate (see van den Ban's article in this chapter).

To sum up, it appears that the acquisition of information by an individual is primarily dependent upon his own observation and his interaction with other people in his environment. The effect of the mass media seems to be only moderate.

DIFFUSION OF NEW INFORMATION

Research on diffusion of new information points to the extreme importance of an individual's interacting with other people in his environment. The most significant research in this area falls under the category of "diffusion of innovations" research (Rogers, 1962). "Innovations" are new products or new procedures, and the acceptance of either requires the acquisition of new information. In most instances this new information will be inconsistent with old information and with old behavioral patterns, thus, the diffusion of innovations is particularly difficult because of the screening processes of individuals.

THE PRINCIPLE OF HOMOPHILY. One of the most important principles derived from research on the diffusion of innovations is the principle of homophily. "Homophily" is the degree to which pairs of individuals who interact are similar in certain attributes (beliefs, values, education, social status). Simply put, "the principle of homophily" is that acquisition of information most frequently occurs between a source and a receiver who

are alike, i.e., homophilous. The reciprocal of this principle also holds: The more "heterophilous" (unlike) are source and receiver, the less likely there will be acquisition of information.

While the terms "homophily" and "heterophily" have only recently become common in the communication literature, the concepts which they represent are not new and are almost commonsensical. The concept is not a difficult one. It merely means that a plumber is more likely to acquire new information from another plumber than he is from a college professor; a teen-ager is more likely to acquire new information from a teen-ager than from a policeman; a black ghetto resident is more likely to acquire information from another black ghetto resident than from a white suburbanite.

THE CHANGE AGENT AND THE OPINION LEADER. Although all of us are motivated to attempt to diffuse information from time to time, some people find this to be a primary function in their professional career. Such people have been referred to as "change agents." The function of these people in society is to disseminate information in order to achieve behavioral change among people. Such people are normally vastly more informed on the subject under consideration than the people with whom they are concerned. In short, a highly heterophilous state normally exists in such transactions. Not only is the change agent more informed, he often holds higher social status, is better educated, and is much more secure economically. A fact of the change agent's life, therefore, is the extreme difficulty of accomplishing his communication objective. People normally do not turn to change agents for information because of the heterophilous state that exists between them; rather, they turn to what have been called "opinion leaders" for information. An "opinion leader" is a person who is essentially similar to the person who turns to him for information; however, he will normally have slightly more expertise. He may, but not necessarily, be slightly more educated, slightly higher in social status, and slightly more secure economically. We normally have considerable respect for our opinion leaders, and yet we feel comfortable with them. There is not complete homophily between us and our opinion leaders, but the heterophily that is present is not large.

The research in the area of diffusion of innovations suggests that the most expeditious way in which information can be diffused is through a process whereby the change agent diffuses the information to the opinion leader, who then diffuses the information to his followers. For example, a government agricultural specialist (change agent) may inform a leader of a small village (opinion leader), who may then inform the other villagers.

PROPOSITIONS DERIVED FROM DIFFUSION RESEARCH. Rogers and Bhowmik's paper explicates 12 propositions that have been derived from research on diffusion of innovations. Because their paper is reproduced in

this chapter, we will not elaborate the propositions here. We would suggest that you read their article before continuing to the next section of this essay.

IMPLICATIONS OF THE ACQUISITION, PROCESSING, AND DIFFUSION OF INFORMATION FOR THE COMMUNICATOR

Our concern in the foregoing part of this article, was with describing how humans process information and how information is diffused from one person to other persons. We have not attempted to summarize all the research in this area—which comes from diverse academic fields—but we have attempted to select that research upon which can be based meaningful suggestions to the practicing communicator. Since, as communicators, we function both as sources and receivers of information, we will divide the following recommendations into these categories.

THE COMMUNICATOR AS RECEIVER OF INFORMATION. It is essential for our intellectual growth and prosperity for us to acquire new information almost constantly. The person who ceases to acquire new information shortly becomes out of touch with the reality of his world. Meaningful acquisition of information requires effort on the part of the individual, if he is not to let valuable information slip by him. The acquisition of information, then, is an active rather than a passive process.

The first step is the identification of the information we already have. We must ask ourselves what we know about a given object or event. What information have we already internalized? This personal inventory is not an easy task, because much of the information that we have stored in our minds is not readily available at the conscious level. We tend to store information and only recall it when it seems relevant. Nevertheless, we must make this special effort to try to dredge up everything in our minds that is related to our current task or situation, in order to determine what we know.

Equally as important as determining what information we already possess is determining what reinforcers affect us. In short, you must ask yourself: What motivates me? What do I seek? What do I like? Since reinforcement appears to control the acquisition of information, it is important that we be aware of that which reinforces us. Thus we can maintain more control over our acquisition of information. As we watch television, for example, advertisers are attempting to get us to acquire certain information by reinforcing us for that behavior. Such acquisition may not be in our best interests, and our only defense against this attempt at influence is to be aware of what is motivating us and what influence is being attempted.

As we noted earlier, there appears to be a tendency in all human beings to screen information. This screening tends to block information

which is inconsistent with information already acquired or with the desires of the individual. Screening can be overcome, and we often do overcome it, but in order to maximize our opportunity to acquire useful information, we must constantly be aware of our tendency to screen. Our tendency to expose ourselves selectively to consistent information must be overcome by a conscious effort to expose ourselves to information which we believe will be inconsistent. In the political scene, if we are liberals we should attempt to listen to conservative speakers and to others whose views differ from ours; if we are conservatives we should attempt to listen to liberal speakers as well as others' positions. If we are sincerely interested in acquiring information so that we can make intelligent decisions, we must always seek to hear the "other side." Similarly, when we are exposed to information, part of which is consistent and part of which is inconsistent with our present cognitions and motivations, we need consciously to avoid selective attention. We should try to pay as much attention to the information which we do not like as we do to the information which we do like. We probably will never be completely successful in such an attempt, but merely to make the attempt increases the probability of success.

Overcoming our own selective perception is particularly difficult, because this process occurs at such an unconscious level that we are very unlikely to be aware of its functioning. One way of overcoming this screening process is to check your perceptions against those of other people, particularly people with whom you disagree. If both those with whom you agree and those with whom you disagree perceive something the same way you do, it is likely your perceptions are correct. However, if your opponent perceives something differently than you, there is good reason to suspect that one, or both, of you are selectively perceiving the information.

Heterophily is probably the biggest barrier to our acquisition of new information, and it probably is the easiest to overcome. We tend to communicate mostly with our peers and avoid communicating with people holding a superior position. We should make every effort to communicate with the people who are heterophilous with us but are likely to have information which will be of use to us. Communication with people who know the same things we know does not provide much opportunity for the acquisition of new information. Communicating with heterophilous individuals does provide such opportunity.

We may summarize our suggestions for the practicing communicator as a receiver of information very simply: Be aware, and make an effort to acquire information. Such recommendations may sound platitudinous, but they are not. The barriers to our acquisition of new information are primarily within our own minds. The only way we can overcome those barriers is to be aware of them and to consciously attempt to control them.

THE COMMUNICATOR AS SOURCE OF INFORMATION. When we attempt to communicate information to another individual, we must be concerned with most of the same things that we must be concerned with as a receiver of information. However, we must be concerned with them on a different level. The best way to start is to presume that the receiver is not going to make an attempt to overcome the barriers to the acquisition of information, and that we have to help him.

First of all, we must determine as nearly as possible what information the receiver already has. If we are going to present information which is inconsistent with the information he already has we must be prepared to resolve that inconsistency for him. We know that if we don't, his tendency will be to screen our information out. One of the best ways of overcoming this problem is to know what reinforces the receiver. If our information is presented in a context which is reinforcing to the receiver, we increase the probability that he will acquire the information. Simply put, if you wish to communicate information to another person you need to know the person and adapt your communication to him and his needs.

However, even if we do know our receiver and attempt to adapt our communication to him, the process of screening may still get in our way. We must seek actively to overcome the tendency to screen on the part of the receiver. To begin with, we must concern ourselves with the tendency of receivers to selectively expose themselves to consistent information. If we wish to overcome this barrier, the best way is to present our information at a time and in such a way that the receiver would be expecting that information presented would be consistent, or at least when he is not expecting inconsistent information.

Let us assume that we are running a political candidate's campaign. We have X dollars to spend on television. We may spend that money for half-hour or hour speeches or presentations by our candidate, or we may choose to spend the money on spot announcements. The latter choice would appear to be the wiser: Because these spot announcements would occur without the receiver expecting them, he may be exposed to our information before he is fully aware of what is happening. Moreover, should the television listing for the evening indicate a half-hour's or hour's political presentation by our candidate, anyone who is not a supporter could easily screen out the information, merely by switching to another channel. Briefly, the best way to overcome the tendency toward selective exposure is to provide exposure under circumstances where it is not expected.

Overcoming the tendency to attend selectively to consistent information needs to be accomplished in a similar manner. If we know the receiver will tend to "tune us out" because our information is inconsistent, we need to place it into a context where it arouses attention. Providing reinforcement for attention is a good technique. Such reinforcement may take the

form of entertainment, as when a newspaper columnist who wishes to provide new information to his audience may cloak that information in an entertaining or amusing style. The reader may read the column because it is entertaining, and acquire the information, whereas otherwise he might not read it at all.

Probably the best means of overcoming the tendency to perceive information selectively is to determine in advance what type of misperception is likely to occur and specifically point out that that perception is incorrect. As we have said, selective perception is almost completely at the unconscious level. When it is brought to the conscious level by a communicator it is effectively overcome in most instances.

Selective retention can be overcome in a similar, direct manner. Since information is likely to be forgotten, the surest way to insure that it will not be forgotten is to remind the individual of it continuously. This is a principle upon which much national advertising of products is based. Everybody who smokes has heard of Kent cigarettes, those who smoke another brand may forget all about Kent. The advertiser attempts to overcome this selective retention by constantly putting Kent in front of the individual through his billboard and magazine advertisements.

Screening on the part of the receiver can be overcome by the source if he makes a conscious attempt to do so. Most communicators do not effectively overcome their receivers' screening processes, either simply because they are unaware that they exist or because they make no effort to overcome them. The diffusion of information can be enhanced substantially by making such an effort.

The principle of homophily is a very powerful principle of effective communication. As sources of information, we need to be fully aware of the implications of this principle and consciously attempt to take advantage of them. The first step in making homophily work for, rather than against, us is to analyze the receiver with whom we hope to communicate. Such an analysis is designed to determine in what respects we are hetrophilous with our receiver and in what respects we are homophilous with him. If we observe that very little homophily exists, it is clear that we are not the appropriate person to attempt the communication. We must seek to communicate with an opinion leader. However, if some homophily does exist, we may attempt to communicate with the individual by stressing our similarities. We should remember that there is a natural cycle involving homophily and communication: The more homophilous with an individual we are, the more we communicate with him, and the more we communicate with him, the more homophilous with him we become. Thus, if sufficient homophily is not present today for us to convey effectively the information we desire to communicate, one of the ways of increasing the probability of success in the long run is simply to communicate with the individual

more and more, in order to establish homophily. At a point sometime in the future, therefore, sufficient homophily may exist to enable us to communicate information to that individual.

PRINCIPLES OF HUMAN INFORMATION PROCESSING AND DIFFUSION

1. People acquire information from external stimuli, from internal stimuli, and from combinations of the two.
2. People acquire information by being repeatedly exposed to contiguous stimuli and responses.
3. People tend to process information that is reinforcing and fail to process information that is nonreinforcing.
4. People tend to expose themselves to information that is consistent with their attitudes and beliefs but to avoid exposure to inconsistent information.
5. People tend to pay more attention to information that is consistent with their attitudes and beliefs than they do to inconsistent information.
6. People tend to perceive information as consistent with their attitudes and beliefs even when it is inconsistent.
7. People tend to remember information that is consistent with their attitudes and beliefs and forget information that is inconsistent.
8. Most of our information is acquired from interpersonal communication.
9. The mass media generally have a major impact on the diffusion of new information but have little impact on attitudes.
10. The major impact of the mass media in the diffusion of information is through a multi-step flow: mass media to opinion leader to person two to person three and so on.
11. Acquisition of information most frequently occurs between a source and a receiver who are homophilous.
12. Heterophily is the most serious barrier to human communication.

The communication of information from one individual to another is not a simple process. It is likely to be unsuccessful unless either the source or the receiver, or both, makes a conscious effort to facilitate the communication transaction.

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