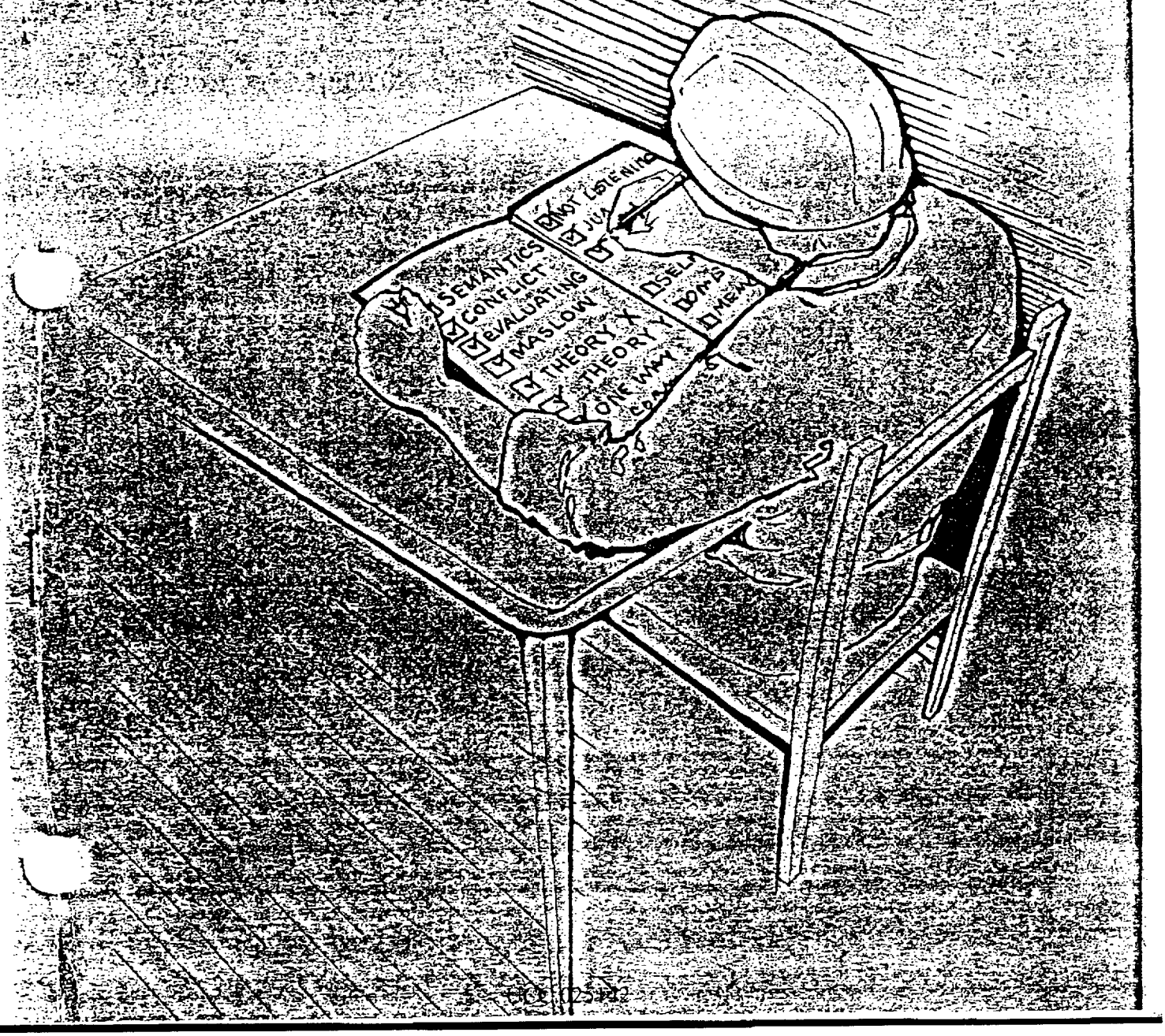
PLAINTIFF'S EXHIBIT

UC-2546

Communications

U.S. Department of Labor
Mine Safety and Health Administration
National Mine Health and Safety Academy

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TABLE OF CONTENTS

COMMUNICATION OVERVIEW..... 1

DEFINITION/PURPOSE..... 2

UNDERLYING PURPOSES..... 3

COMMUNICATION MODEL..... 5

TRANSMITTING FILTER..... 8

VERBALS..... 9

NONVERBALS.....11

RECEIVING FILTER.....15

ONE WAY/TWO WAY COMMUNICATIONS.....18

FEEDBACK.....19

BARRIERS.....21

CONFLICT.....32

INSPECTOR IMAGE.....48

INSPECTOR ROLES.....51

SELF-FULFILLING PROPHECY.....52

MASLOW.....55

THEORY X/THEORY Y.....64

REFERENCES AND SUGGESTED READING.....71

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ACL Doc 17512 · Page 2 of 74 **asbestosclaims.law/library/17512/2**

COMMUNICATIONS OVERVIEW

Communication is a vital element in every good safety program. In fact, communication is the key element in every successful business and social venture. Because of this it is essential to understand the nature of the communication process, the barriers to communication, and ways to improve communication skills.

What then is "good" communication? While there are certain underlying principles, it is apparent that different people have different points of view.

Managers tend to see communications as a process of keeping people informed, or of insuring that messages go up or down the organizational structure. "Good" communications from this point of view means that everyone who needs to receive a message receives it.

Language teachers tend to view communications as a set of skills used to present and receive information. From this point of view, then, a "good" communicator is one who reads quickly with comprehension, writes fluently, and speaks with no errors in pronunciation or grammar.

Sociologists often see communications as a process of establishing relationships with other people. "Good" communicators in this sense, then, would be those who have mastered the art of getting along with or motivating other people.

A psychological view of communication is that people always present a view of themselves (their self-concept). They further stress that as a person changes the image of himself, he will change the way in which he communicates.

General Semanticists hold a view that man's behavior is shaped in part by the language he speaks. In the words of S. I. Hayakawa, a person "is affected every hour of his life not only by the words he hears and uses, but also by his unconscious assumptions about language. These unconscious assumptions determine the way he takes words - which in turn determines the way he acts, whether wisely or foolishly. Words and the way he takes them determine his beliefs, his prejudices, his ideals, his aspirations."

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DEFINITION/PURPOSE

The definition of communication that will be used throughout this booklet is:

COMMUNICATION
is what we do
to GET
and GIVE
UNDERSTANDING

The purpose of this booklet is not to teach an individual how to communicate, but to help him evaluate his communication in a particular situation to determine whether it has been effective. In order to accomplish this, bits and pieces of various communication theories will be presented: traditional communication theory, management communications, self-image psychology, motivation theory, and conflict resolution.

Abraham Maslow has said, "If the only tool you have is a hammer, you tend to see every problem as if it is a nail." This is particularly true of the "tool" of communication. Many people are unaware of the versatility of communication, and consequently use that tool in the same way over and over again in every situation. They may fail to see that in many instances it is not getting the results that they would like.

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ACL Doc 17512 · Page 4 of 74 asbestosclaims.law/library/17512/4

UNDERLYING PURPOSES

Each person always has a purpose for communicating, whether he is aware of it or not. One of the major purposes of communication is to get or give information. Another purpose is to persuade. Yet sometimes communication is engaged in simply for pleasure - for entertainment, or for maintaining social relationships.

The message we get or give depends on the dominant communication purpose in a particular situation. However, for the most part people are unaware of the real purpose behind their communication. In every communication situation it has been said that there are at least three underlying, overlapping, and often contradictory purposes: one in relation to the subject, one in relation to the self, and one in relation to the other person.

Most people probably intend for their communication to be carried out at the subject level - to get or give information. Little do they realize that they are continually telling others how they feel about them and about themselves.

Consider a person giving others a factual message about his subject of expertise. Accompanying his factual message will be nonverbal cues telling how he feels about himself - whether he thinks he is brilliant or dull, confident or afraid, dominant or submissive. For example, a person who sees himself as dominant will often speak in a louder voice, look more intently and face others more directly, and maintain a relaxed body posture. At the same time this speaker will be giving subtle nonverbal cues, letting his listener know if he finds them stimulating or dull, dumb or smart, likeable or unpleasant. If the speaker finds his listener unpleasant, he may use less eye contact, stand further away from or lean away from the listener, and maybe even turn his shoulders slightly away from him.

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ACL Doc 17512 · Page 5 of 74 **asbestosclaims.law/library/17512/5**

KEY CONCEPT

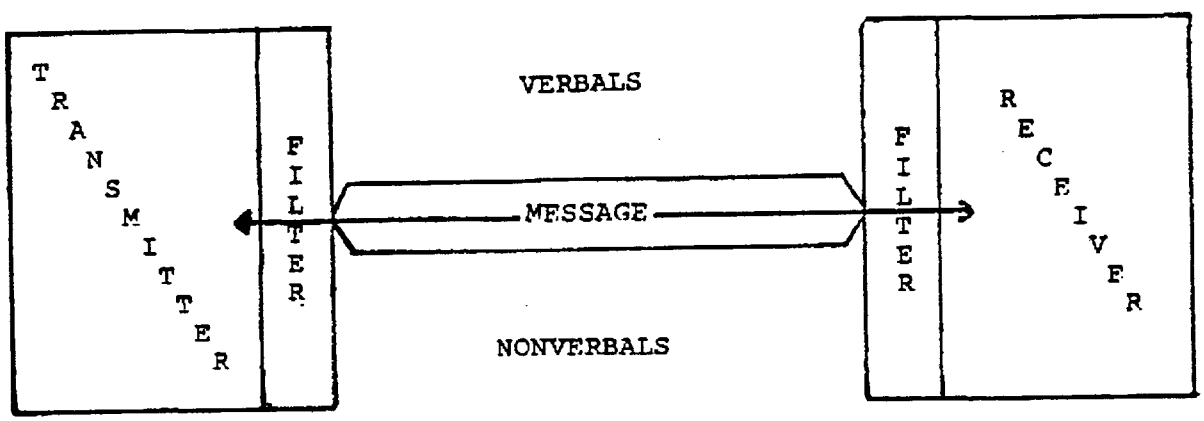
THERE IS NO "RIGHT" WAY TO COMMUNICATE

Communication is only a tool that can help to solve problems. As such, it is neither good nor bad. Contrary to a popular assumption, there is no magic communication formula that will solve all the complex problems encountered daily in the work environment. There are no "right" or "wrong" ways to communicate - just different ways. An approach that may work very well in one situation, may cause problems in another instance.



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COMMUNICATION MODEL



The model in the figure above is intended to be an overview of what takes place in the communication process. It shows some of the understandings we are trying to give and get.

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ACL Doc 17512 · Page 7 of 74 **asbestosclaims.law/library/17512/7**

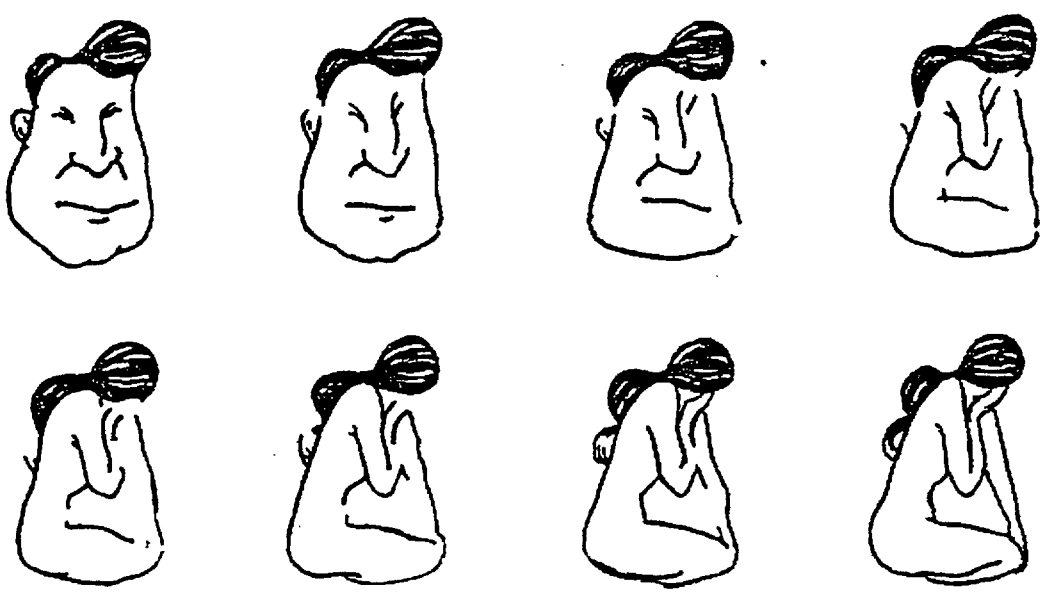
KEY CONCEPT

AT ANY GIVEN MOMENT, EACH PERSON'S PERCEPTION IS CORRECT AND ACCURATE FOR HIM

The way that a person views other people and the world around him depends on the way that he views himself. Each person grows up with differing experiences and emotional reactions. Everyone develops unique value and belief systems concerning the way he is in relation to others and the world around him. Therefore, when he perceives a current situation, he perceives it, not as it really exists, but through a set of "rose-colored glasses". People perceive based on their past experiences in similar situations.

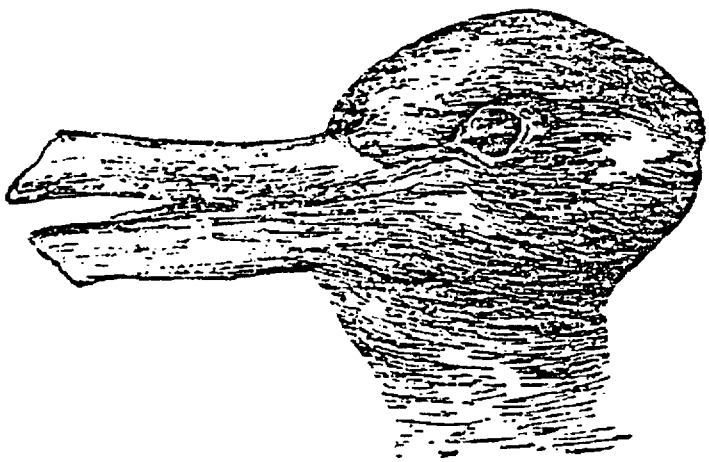
This creates many communication problems, as many times individuals are confronted by others who see "reality" from a different point of view. Not believing other people have as "realistic" a view as he does, he often sets out to show the inconsistencies in their viewpoint, not realizing he may have as many inconsistencies in his own.

While it is entirely possible for people to receive new information, and thereby alter their perception to a degree, this is rarely achieved in a threatening atmosphere. Often when a person feels his sense of "reality" is being challenged, he establishes mental barriers which effectively shut off any communication.



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KEY CONCEPT







WHAT IS IT?

This fascinating picture is not an illusion. It is an actual photograph of a familiar subject. CAN YOU SEE IT ???

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ACL Doc 17512 · Page 9 of 74 **asbestosclaims.law/library/17512/9**

TRANSMITTING FILTER

The first step in communications seems to be that the speaker gets some thought in his mind that he wants to get across to another person. What he is probably not aware of, however, is that he filters every message he intends to send. He filters it based on his perception, experience, education, attitudes, and emotions. All of man's past experiences cause him to have, in each communication situation, an opinion of the subject, an opinion of himself, and an opinion of the other person. These opinions are what the speaker is actually transmitting to the other person. They become the underlying, overlapping, and often contradictory purposes behind his communication.

The opinion of ourself, and to some extent our opinion of the other person is reflected in our transmitting habits. Each of us develops certain characteristic nonverbal communication habits that we use over and over again. For example, a person may be continually transmitting "dominance" by his habits of frowning and finger pointing.



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ACL Doc 17512 · Page 10 of 74
asbestosclaims.law/library/17512/10

After the speaker's intended message has gone through his transmitting filter, he typically uses words to send the actual message. This is the part of the communication process that traditional communication theorists tried to influence. They believed that the primary communication difficulty was related to inadequate language skills. In fact, these skills, or lack of them, do tend to influence the message sent. Things such as vocabulary, sentence structure, accent, and grammar can cause others to get contrary messages to the one the speaker thought he sent. An example of this is shown in the following:

> *"A plumber of foreign extraction wrote the National Bureau of Standards and said he found that hydrochloric acid quickly opened plugged drainage pipes and inquired if that it was a good thing to use. A scientist at the Bureau replied that 'the efficacy of hydrochloric acid is indisputable, but the corrosive residue is incompatible with metallic permanence.'*
>
> *"The plumber wrote back thanking the Bureau for telling him that hydrochloric acid was all right. The scientist was disturbed about the misunderstanding and showed the correspondence to his boss - another scientist - who wrote the plumber: 'We cannot assume responsibility for the production of toxic and noxious residue with hydrochloric acid and suggest you use an alternative procedure.'*
>
> *"The plumber wrote back that he agreed with the Bureau - the hydrochloric acid worked fine. Greatly disturbed, the scientists took their problem to the top boss. He broke with scientific jargon and wrote the plumber: 'Don't use hydrochloric acid. It eats hell out of pipes."*

[1] "Inside Washington" by the Chicago Sun Washington Bureau, Chicago Sun, February 17, 1947, p. 10.

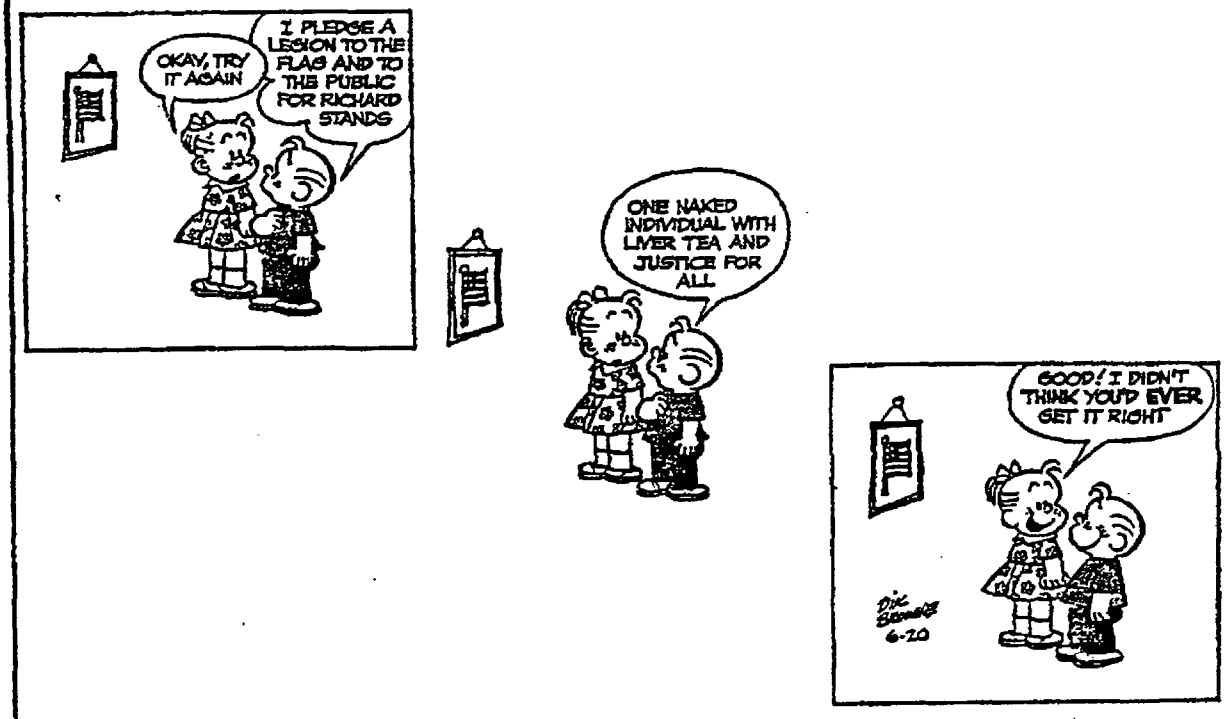
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KEY CONCEPT

MEANINGS ARE NOT IN WORDS - MEANINGS ARE IN PEOPLE

Words are only arbitrary symbols in communication. They have specific meanings only because people have repeatedly used them in a particular way to stand for some idea. Words mean only what people intend for them to mean. Often people will use one set of words to get a message across only to find that the receiver understood a different message from the set of words.

All of us assign meanings to words based on our perception of how the word has been used in the past. Often that perception is limited. Children are often guilty of the "misuse" of words, based on limitations of their language skills. Consider the example of the little boy who was trying to explain how dull and boring he thought that adults were. His explanation was, "there is nothing in the world any duller than adultery."



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ACL Doc 17512 · Page 12 of 74
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NONVERBALS

Nonverbal communication is becoming a fascinating topic for many Americans. It has been popularized by such books as How To Read a Person Like a Book and Body Language. Much research is currently being done in this area.

Researchers have identified several ways that people use nonverbal messages to accompany their verbal message.

1. People often use nonverbals to say the same thing that is being said verbally. For example, smiling to accompany a friendly message.

2. People often use nonverbal cues to say something which is not being said aloud. For example, patting a friend on the shoulder to express sympathy.

3. People use nonverbals to accentuate what they are saying aloud. Tone of voice and inflection are frequently used to do this.

4. People use nonverbals to modify spoken messages. These cues add meaning or detail to the spoken message, but cannot actually replace it.

5. People also use nonverbals to send messages which contradict spoken ones. Sometimes this is done purposefully, as in the case of sarcasm, but other times it is unintentional.

6. People regulate conversations through their nonverbal behavior. They give cues letting the other person know when it is his turn to speak, how long he is allowed to speak, and when the conversation will end.

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ACL Doc 17512 · Page 13 of 74
asbestosclaims.law/library/17512/13

NONVERBALS

Nonverbal messages take many forms. For the purpose of study, researchers having classified the different forms into various *codes:*

1. Kinesics is the code that refers to body movement. This includes head position and movement, facial expressions, and leg movements.

2. Haptics is the code that refers to touch. Touch is an extremely important means of communication. In fact, a number of studies has proven that lack of touch can cause illness, retardation, maladjustment, and even death of children. Around the early 1900's, the infant mortality rate in some orphanages was close to 100%. The cause was attributed to lack of touch and human contact.

   Although touch needs remain important even into adulthood, in our society there are definite touch norms which should not be violated.

3. Proxemics is the nonverbal code related to personal space. It has been described as an invisible bubble which each person has surrounding his body. As with touch, our society has certain distance norms which should not be violated. Below is a table showing the amount of personal distance required according to the type of relationship.

0' - 1 1/2'	intimate zone
1 1/2'- 4'	personal zone
4' - 7'	social zone
7' - 25'	public zone

   Another facet of proxemics is territoriality. This refers to claiming and defending a certain territory as one's own. It is, at least in part, one of the reasons why some mine owners become very defensive when an inspector enters the mine property.

4. Physical appearance is also a nonverbal code. It is probably the single most important element contributing to first impressions. It includes natural body features, such as, body type and facial appearance; body adornments, such as clothes or jewelry; and also grooming elements, such as hair styling and body cleanliness.

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ACL Doc 17512 · Page 14 of 74 asbestosclaims.law/library/17512/14

5. Occulesics is the nonverbal code related to eye movement. All of us have heard expressions such as, "The eyes are mirrors of the soul." Credibility is an attribute that is perceived to a large extent by the use of eye expression. Direct eye contact is interpreted as a sign of competence, honesty, and composure. Avoidance of eye contact is often interpreted as deceit or incompetence.

   Eye contact also is used to establish dominance/submissiveness or status in a particular situation. Powerful people have more eye contact directed toward them than other people. A steady,direct gaze is used by persons of high status when talking with low-status persons. Low-status persons are not supposed to maintain direct eye contact with superiors.

6. Vocalics deals with the vocal qualities of spoken language. It includes such things as tone of voice, rhythm, loudness, rate of speaking, and articulation.

7. Chronemics is the nonverbal code which deals with the use of time. One interesting characteristic that we communicate with time is status. High status people frequently keep others waiting. The use of punctuality or lack of it as an intentional nonverbal is shown in the following story about Harry Truman. Shortly after becoming President, he was visited by a newspaper editor. The editor had waited for forty-five minutes when an aide went in to tell Truman that the man was becoming very irritated about the wait. Truman replied, "When I was a junior senator from Missouri that same man kept me cooling at my heels for an hour and a half. As far as I'm concerned, the son-of-a-bitch has forty-five minutes to go."

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ACL Doc 17512 · Page 15 of 74 asbestosclaims.law/library/17512/15

KEY CONCEPT

YOU CANNOT NOT BEHAVE - BEHAVIOR HAS NO OPPOSITE

Communication takes place in two modes: verbal and nonverbal. Many people think that they communicate only when they are consciously trying to do so. This is not the case. They are continually displaying some form of behavior (nonverbal communication) - either intentionally or unintentionally. When this behavior is observed by another individual, it becomes communication. Sleeping, for example, is a form of behavior in which no one may be consciously trying to send a message. However, many different messages can be received by persons observing a sleeper. A speaker, discovering someone asleep in his audience, may get one message. A supervisor, observing a worker asleep on the job, will probably get a different message. And a mother, watching her child sleep, will get yet another message.



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ACL Doc 17512 · Page 16 of 74 **asbestosclaims.law/library/17512/16**

RECEIVING FILTER

The receiving filter is formed by the same elements as the transmitting filter: perception, knowledge, experience, attitudes and emotions. These elements influence our opinions which in turn determine how or whether we receive a message.

Sometimes these opinions cause us to act characteristically in certain ways when we hear a message. Probably the most common and most problematic receiving habit is simply not listening.

Listening should be an active, not a passive, activity. Active listening means, not just hearing the words which are spoken, but trying to catch the attitude and adeas of the speaker and looking at them from his point of view. Active listening is particularly important in conflict situations, yet this is when it is practiced least.

One seemingly simple way to practice listening is to restate or summarize every thing your communications partner says before presenting your own point of view. Sound simple? It is not! But one thing that does frequently happen is that emotions tend to fade, and the conversation becomes more productive.



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ACL Doc 17512 · Page 17 of 74
asbestosclaims.law/library/17512/17

RECEIVING FILTER

20 WAYS TO IMPROVE LISTENING

1. Realize that listening is hard work.
2. Prepare to listen.
3. Know your biases.
4. Choose your listening position carefully.
5. Take notes.
6. Concentrate.
7. Don't be distracted.
8. Be open-minded.
9. Be interested.
10. Be empathetic.
11. Delay argument.
12. Delay judgement.
13. Listen critically.
14. Listen for more than words.
15. Look for main points.
16. Use listener responses.
17. Don't interrupt.
18. Use reflecting phrases.
19. Ask for added information.
20. Limit your own talking.

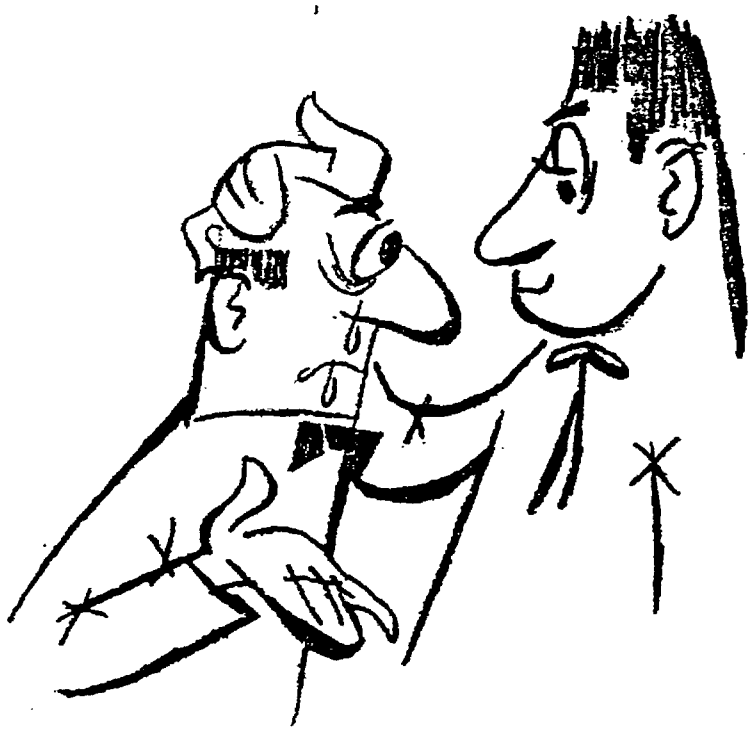
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KEY CONCEPT

COMMUNICATION IS MUTUALLY INFLUENCING

In a two-way communication process, the participants are continually influencing each other. A signal sent by one determines in part the response of the other, which in turn becomes a signal for the original speaker. It is a circular not a linear process. Each person is responsible for the effect of his communication on others. This effect is readily understood by anyone who has started the day by being "grumpy", only to find that soon he may have caused everyone around him to be "grumpy". The same effect is seen in the supervisor who disregards safety rules. This attitude is commonly communicated to all the workers around him.



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ACL Doc 17512 · Page 19 of 74 asbestosclaims.law/library/17512/19

ONE WAY/TWO WAY

Differences between one-way and two-way communication

1. One-way is faster
2. Two-way insures greater accuracy
3. In one-way the speaker feels relatively confident; the receiver may feel frustrated
4. In two-way the receiver feels relatively confident; the speaker may feel frustrated

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FEEDBACK

Feedback is a way of giving help; a corrective mechanism for the individual who wants to learn how well his behavior matches his intentions.

RULES FOR EFFECTIVE FEEDBACK

It is descriptive rather than evaluative

It takes into account both the receiver and giver of feedback

It is directed toward behavior which the receiver can do something about

It is solicited rather than imposed

It is well-timed

It is checked to insure clear communication

It is checked with others to insure accuracy

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FEEDBACK

For a communication situation there are certain factors that tend to inhibit the natural feedback expected.

- Too high control or status
- Too much one-upsmanship
- Demanding participation (causes anxiety)
- Overly social behavior
- Lack of reward for feedback
- Personality of the receiver (shyness)

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POTENTIAL BARRIERS TO COMMUNICATION

1. AGE, BACKGROUND, BIASES

2. ENVIRONMENT IN WHICH THE COMMUNICATION TAKES PLACE

3. STEREOTYPING PERSONS

4. TENDENCY TO JUDGE/EVALUATE

5. JUMPING TO CONCLUSIONS

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ACL Doc 17512 · Page 23 of 74 asbestosclaims.law/library/17512/23

WORKSHEET

A businessman had just turned off the lights in the store when a man appeared and demanded money. The owner opened a cash register. The contents of the register were scooped up, and the man sped away. A member of the police force was notified promptly.

Statements about the story	T	F	?
1. A man appeared after the owner had turned off his store lights.	☐	☐	☐
2. The robber was a man.	☐	☐	☐
3. A man did not demand money.	☐	☐	☐
4. The man who opened the cash register was the owner.	☐	☐	☐
5. The store owner scooped up the contents of the cash register and ran away.	☐	☐	☐
6. Someone opened a cash register.	☐	☐	☐
7. After the man who demanded the money scooped up the contents of the cash register, he ran away.	☐	☐	☐
8. While the cash register contained money, the story does not state how much.	☐	☐	☐
9. The robber demanded money of the owner.	☐	☐	☐
10. The story concerns a series of events in which only three persons are referred to: the owner of the store, a man who demanded money, and a member of the police force.	☐	☐	☐
11. The following events in the story are true: someone demanded money, a cash register was opened, its contents were scooped up, and a man dashed out of the store.	☐	☐	☐

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ACL Doc 17512 · Page 24 of 74
asbestosclaims.law/library/17512/24

THE WORD IS NOT THE THING.

From a general semantics point of view, communication problems are often caused by persons responding to words as if the word were the thing.

In the following excerpt from his article "The Relation of Habitual Thought and Behavior to Language, "The anthropologist (and insurance investigator) Benjamin Lee Whorf describes some disastrous consequences of inaccurate verbalizing.

. . . in the course of my professional work for a fire insurance company . . . I undertook the task of analyzing many hundreds of reports of circumstances surrounding the start of fires, and in some cases of explosions. My analysis was directed toward purely physical conditions, such as defective wiring, presence or lack of air spaces between metal flues and woodwork, etc., and the results were presented in these terms. Indeed it was undertaken with no thought that any other significances would or could be revealed. But in due course it became evident that not only a physical situation qua physics, but the meaning of that situation to people, was sometimes a factor, through the behavior of the people, in the start of the fires. And this factor of meanings was clearest when it was a linguistic meaning, residing in the name or the linguistic description commonly applied to the certain type, that is, great care will be exercised; while around a storage of what are called "empty gasoline drums", it will tend to be different--careless, with little repression of smoking or of tossing cigarette stubs about. Yet the "empty" drums are perhaps the more dangerous, since they contain explosive vapor. Physically the situation is hazardous, but the linguistic analysis according to regular analogy must employ the word "empty" which inevitably suggests lack of hazard. The word "empty" is used in two linguistic patterns: (1) as a virtual synonym for "null and void, negative, inert," (2) applied in analysis of physical situations without regard to, e.g., vapor, liquid vestiges, or stray rubbish, in the container. The situation is named in one pattern (2) and the name is then "acted out" or "lived up to" in another (1) this being a general formula for the linguistic conditioning of behavior into hazardous forms.

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ACL Doc 17512 · Page 25 of 74 asbestosclaims.law/library/17512/25

In a wood distillation plant the metal stills were insulated with a composition prepared from limestone and called at the plant "spun limestone". No attempt was made to protect this covering from excessive heat or the contact of flame. After a period of use, the fire below one of the stills spread to the "limestone", which to everyone's great surprise burned vigorously. Exposure to acetic acid fumes from the stills had converted part of the limestone (calcium carbonate) to calcium acetate. This when heated in a fire decomposes, forming inflammable acetone. Behavior that tolerated fire close to the covering was induced by use of the name "limestone", which because it ends in "stone" implies noncombustibility.

A huge iron kettle of boiling varnish was observed to be overheated, nearing the temperature at which it would ignite. The operator moved it off the fire and ran it on its wheels to a distance, but did not cover it. In a minute or so the varnish ignited. Here the linguistic influence is more complex; it is due to the metaphorical objectifying (of which more later) of "cause" as contact or the spatial juxtaposition of "things"--to analyzing the situation as "on" versus "off" the fire. In reality, the stage when the external fire was the main factor had passed; the overheating was now an internal process of convection in the varnish from the intensely heated kettle, and still continued when "off" the fire.

An electric glow heater on the wall was little used, and for one workman had the meaning of a convenient coathanger. At night a watchman entered and snapped a switch, which action he verbalized as "turning on the light". No light appeared, and this result he verbalized as "light is burned out". He could not see the glow of the heater because of the old coat hung on it. Soon the heater ignited the coat, which set fire to the building.

A tannery discharged waste water containing animal matter into an outdoor settling basin partly roofed with wood and partly open. This situation is one that ordinarily would be verbalized as "pool of water". A workman had occasion to light a blowtorch near by, and threw his match into the water. But the decomposing waste matter was evolving gas under the wood cover, so that the setup was the reverse of "watery". An instant flare of flame ignited the woodwork, and the fire quickly spread into the adjoining building.

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ACL Doc 17512 · Page 26 of 74 asbestosclaims.law/library/17512/26

A drying room for hides was arranged with a blower at one end to make a current of air along the room and thence outdoors through a vent at the other end. Fire started at a hot bearing on the blower, which blew the flames directly into the hides and fanned them along the room, destroying the entire stock. This hazardous setup followed naturally from the term "blower" with its linguistic equivalence to "that which blows", implying that its function necessarily is to "blow". Also its function is verbalized as "blowing air for drying", overlooking that it can blow other things, e.g. flames and sparks. In reality, a blower simply makes a current of air and can exhaust as well as blow. It should have been installed at the vent end to draw the air over the hides, then through the hazard (its own casing and bearings), and thence outdoors.

Besides a coal-fired melting pot for lead reclaiming was dumped a pile of "scrap lead"--a misleading verbalization, for it consisted of the lead sheets of old radio condensers, which still had paraffin paper between them. Soon the paraffin blazed up and fired the roof, half of which was burned off.

Such examples, which could be greatly multiplied, will suffice to show how the cue to a certain line of behavior is often given by the analogies of the linguistic formula in which the situation is spoken of, and by which to some degree it is analyzed, classified, and allotted its place in that world which is "to a large extent unconsciously built up on the language habits of the group". And we always assume that the linguistic analysis made by our group reflects reality better than it does.

Union Carbide trial exhibit UC-2546: MSHA National Mine Health and Safety Academy, 'Communications' Draft Cl... Published by AsbestosClaims.Law
ACL Doc 17512 · Page 27 of 74 asbestosclaims.law/library/17512/27

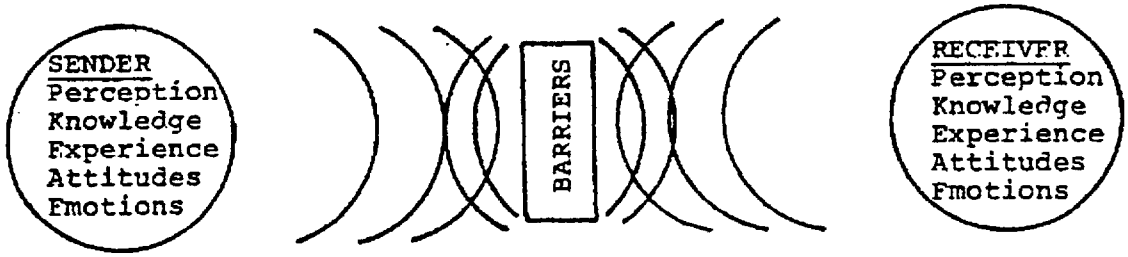
BARRIERS

We have the responsibility for seeing that both parties are active, for we are the sender, the initiator of the communication. We need feedback, and if it is not forthcoming, it is up to us to elicit it.

As every safety professional knows, the results of unclear communication, of misinterpreted information, can be very serious. They include accidents, increased costs, schedule delays, poor quality, and high turnover. We can ask, "If he didn't understand what I meant, why didn't he say so?" There are any number of answers to that question, starting with the most obvious one that he thought he did understand.

Individuals see, hear, and interpret things in different ways. We all come to a situation with our own degree of knowledge, experience, attitude, and emotion. Combined with our level of education and basic differences in the way we perceive things, these factors cause us to look at the same things, hear the same words, or read the same material, yet arrive at different interpretations of the meaning and intent of the message. We must accept the fact that many differences, although not apparent, are, in fact, deterrents to understanding.

Before we can transmit a message without misunderstanding, we must recognize and overcome some of the barriers that get in the way. Schematically, they might look like this:



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ACL Doc 17512 · Page 28 of 74 asbestosclaims.law/library/17512/28

BARRIERS

Difficulties:

A person can be more effective in communication if he recognizes some of the most common difficulties people encounter in seeking to understand each other.

1. People use symbols or words that have different meanings. Each person interprets each word in terms of his background needs, and purposes. Words also differ in meaning in different contexts and situations.

2. Members of the group have different values. People may be so closely identified with their own values that they do not want to consider any others. They may not recognize that anyone could possibly hold another value. They want to hold to their own values and not have them threatened. They refuse to try to understand other people's viewpoints.

3. Different perceptions of the problem. If different interpretations of the problem exist, and no attempt is made to resolve them, people will propose and argue for a variety of solutions without reaching agreement.

4. Emphasis on status. If certain people have superior knowledge, status, or experience, it can block communication if the superiority is emphasized. Communication is more valid and accurate if resource persons are dispersed through the group. An individual hesitates to disagree with a person presumed to be an authority. He is less honest about what he believes.

5. Conflict in interest. When certain individuals are afraid that a decision will be made that will hurt their empire or take away some of the advantages they have, they try to block communication.

6. Attempts to keep feelings out of the discussion. Yet feelings are as important to communication as facts. Feelings are facts, and to attempt to keep them out of a discussion is an attempt to limit the degree of communication.

7. Use of words to prevent thinking. They are not trying to communicate but are trying to control action. It happens in many groups. Individuals use words and symbols that most members don't feel free to question. They seek to associate their argument or proposals with sacred symbols and shut off discussion.

Union Carbide trial exhibit UC-2546: MSHA National Mine Health and Safety Academy, 'Communications' Draft Cl... Published by AsbestosClaims.Law
ACL Doc 17512 · Page 29 of 74 asbestosclaims.law/library/17512/29

8. Lack of desire to understand the other person's point of view or his feelings or his values or his purposes. If a person sees his role as getting people to accept his viewpoint or his values or his perceptions, he hunts ways to convince rather than seeking to understand.

9. Lack of acceptance of diversity. Unless group members value their differences, they don't really attempt to use differences to grow. The tendency of the individual to defend himself is a block to communication. When anyone attempts to protect his position and avoid being exposed as weak, he blocks any kind of attempt by the other person to understand his viewpoint.

10. A one-way concept of cooperation. If the person with superior status believes that people cooperate by going along with his program or idea, other members of the group will not be honest in the messages they send. They will hunt ways of protecting themselves or of convincing the high-status person that they really understand and will do what he wants, even though they are engaging in a program of resistance. When the receiver feels that resistance is necessary, he will break or distort the communication.

11. Feelings of superiority. The sender who has superior feelings does not communicate freely and openly with the receiver. He feels it is unnecessary. The receiver who feels superior does not hear accurately, because he does not believe the words of the sender are important.

12. Vested interests. The person who wants to protect his interests will not be completely open and honest in his communication.

13. Feelings of personal insecurity. If the sender has feelings of insecurity, he will not reveal any type of information that will lower his status in the eyes of the receiver. He will not admit feelings of inadequacy. He will withhold the kind of comments that might reveal some of his reasons for being insecure. If the receiver feels insecure, he will hear only those things that he wants to hear. He will ignore comments that tend to accentuate his feelings of inadequacy or will interpret them as a personal attack. If he interprets them as an attack, he will immediately move to the defensive and hunt ways of further protecting himself or launching a counter-attack. In either case, the original message is lost, and the purpose of the conversation becomes clouded.

Union Carbide trial exhibit UC-2546: MSHA National Mine Health and Safety Academy, 'Communications' Draft Cl... Published by AsbestosClaims.Law
ACL Doc 17512 · Page 30 of 74 asbestosclaims.law/library/17512/30

14. An obvious attempt to sell. When the sender attempts to convince or to convert the receiver, the receiver is forced to protect his integrity by belittling the communication of the sender or by hunting ways of refuting the message.

15. The concepts that the sender and the receiver have of their roles. If they see themselves as coworkers and people with common purposes who play complementary and supplementary roles, they will communicate more accurately. If they see themselves as opponent or as persons with different degrees of responsibility for the successful outcome of the venture, the distortion will be increased.

16. Negative feelings about the situation. If people fear that the situation is one in which they are not respected or their contribution is not valued, they will not attempt to make a real contribution. If they feel that the other person cannot be trusted they will send messages designed to deceive rather than be honest.

Union Carbide trial exhibit UC-2546: MSHA National Mine Health and Safety Academy, 'Communications' Draft Cl... Published by AsbestosClaims.Law
ACL Doc 17512 · Page 31 of 74 asbestosclaims.law/library/17512/31

BARRIERS

TO IMPROVE COMMUNICATION

As a sender, the individual should:

1. See himself as sharing, not telling. If he is there to tell and convince, he will not really hear the other person. He will hear only things to refute. He will concentrate so much on what he has to get across that he will not understand what is happening.

2. See himself as seeking to relate to other people, not to control them. If he sees himself as attempting to control, he hunts ways of blocking communication that will decrease his control. If he seeks to relate, he will be constantly testing his own ideas and values by those of others.

3. See his task as seeking truth rather than convincing others. If his purpose is to seek truth, he will increase his data by becoming aware of the facts known and values held by others. If he seeks to convince he will refuse to hear the other person.

4. Judge his own contribution by the feedback he gets from others rather than his personal judgment. If he depends on personal judgment, he cannot be sure what others hear, or what he is really saying; neither can he clarify his points for others.

5. Look for agreement and any disagreement and seek the meaning the other person intends in the areas of difference. He should value disagreement as much as agreement because it indicates the portions of topics that need further analysis.

6. Seek to be empathetic. If he tries to be empathetic, he may find that reality in a situation is far from what he considers to be the objective interpretation.

7. Seek words with common meanings. He will use more than one word to explain a point to see if the other person makes a more accurate interpretation with one set of symbols than he does with another. He will want the receiver to raise questions about any point that is not clear or about words he does not understand.

8. Seek to eliminate from his behavior actions that threaten. He will be listening with a "third ear" to discover what is not being said.

Union Carbide trial exhibit UC-2546: MSHA National Mine Health and Safety Academy, 'Communications' Draft Cl... Published by AsbestosClaims.Law
ACL Doc 17512 · Page 32 of 74 asbestosclaims.law/library/17512/32

BARRIERS

As a receiver, the individual should:

1. Seek to help the sender clarify his meaning. He should even raise questions from time to time about meaning that appear perfectly clear to him, because he may be interpreting in a way that the sender did not intend.

2. Seek understanding. He can look for agreement in areas where it exists and seek to isolate the areas of difference that he will want to explore later.

3. Seek to identify what is not being said as much as he tries to understand what is being said. If the listener can react in such a way that he helps the sender move into areas that are not being verbalized, he has a better chance of achieving a real communication with the sender. An individual in his roles as sender and receiver will improve communication as he decreases emphasis upon status, removes fear and distrust as far as possible from the situation, remembers that honesty begets honesty, avoids evaluating the other person's contributions, gives attention to the same degree that he demands it, avoids attacking or becoming defensive, and supports the person who is venturing into areas where he is testing the situation to see how open he can be.

   If he is effective in improving the communication the agreements will be understood, the disagreements will be clearer, people will value each other more or less, and the open interpretations will be more nearly similar to private ones.

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Union Carbide trial exhibit UC-2546: MSHA National Mine Health and Safety Academy, 'Communications' Draft Cl...
Published by AsbestosClaims.Law
ACL Doc 17512 · Page 33 of 74
asbestosclaims.law/library/17512/33

CONFLICT

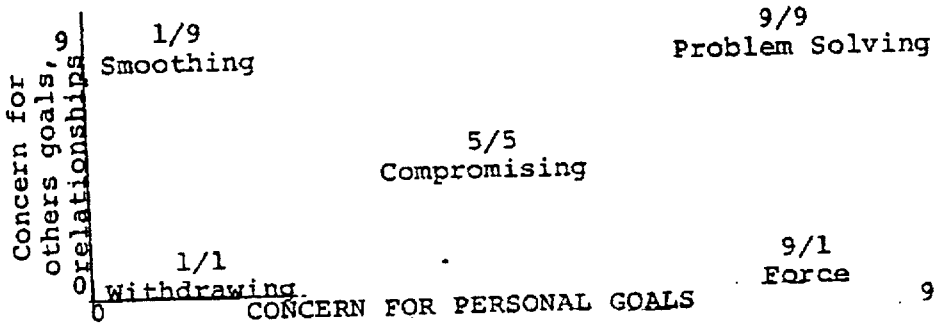
I. Characteristics of Conflict
   A. At least two people involved in some interaction
   B. Real or perceived mutually exclusive goals
   C. Interaction consists of behavior designed to defeat, reduce, or suppress the opponent in order to "win"

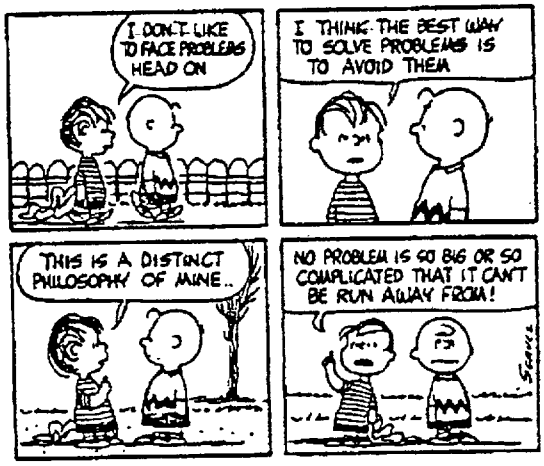
II. Strategies for Dealing With Conflict
   A. Withdrawing (1/1)
      Orientation: Sees conflict as hopeless, useless and punishing; keeps encounters with others as impersonal as possible
      Advantages: Effective when conflict is over trivia
      Disadvantages: Resolves nothing
   B. Forcing (9/1)
      Orientation: Uses persuasion, force and power to "win"
      Advantages: May "win"
      Disadvantages: May lose; often leads to fights; "winning" may cause long range problems
   C. Smoothing (1/9)
      Orientation: Feels differences only serve to drive people apart; gives in to the demands and goals of others
      Advantages: Maintains relationships
      Disadvantages: Problems are not confronted
   D. Compromising (5/5)
      Orientation: Feels differences should be treated in light of the common good, therefore, it may be necessary at times to set goals aside
      Advantages: Neither side loses all
      Disadvantages: Each side may perceive that they gave too much -- This sets the stage for a future conflict
   E. Problem Solving (9/9)
      Orientation: Seeks conflict as natural and helpful if handled well; believes his goals and others' are not necessarily mutually exclusive
      Advantages: Both sides win; trust, cooperation and communication are increased
      Disadvantages: Takes more time; requires more effort

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Union Carbide trial exhibit UC-2546: MSHA National Mine Health and Safety Academy, 'Communications' Draft Cl...
Published by AsbestosClaims.Law
ACL Doc 17512 · Page 34 of 74
asbestosclaims.law/library/17512/34

CONFLICT







Union Carbide trial exhibit UC-2546: MSHA National Mine Health and Safety Academy, 'Communications' Draft Cl...
Published by AsbestosClaims.Law
ACL Doc 17512 · Page 35 of 74
asbestosclaims.law/library/17512/35

CONFLICT MANAGEMENT INSTRUMENT - I

INSTRUCTIONS

Consider situations in which you find your wishes differing from those of another person. How do you usually respond to such situations?

On the following pages are several pairs of statements describing possible behavioral responses. For each pair, please circle the "A" or "B" statement which is most characteristic of your own behavior.

In many cases, neither the "A" nor the "B" statement may be very typical of your behavior; but please select the response which you would be more likely to use.

Union Carbide trial exhibit UC-2546: MSHA National Mine Health and Safety Academy, 'Communications' Draft Cl...
Published by AsbestosClaims.Law
ACL Doc 17512 · Page 36 of 74
asbestosclaims.law/library/17512/36

CONFLICT

1. A. There are times when I let others take responsibility for solving the problem.
   B. Rather than negotiate the things on which we disagree, I try to stress those things upon which we both agree.

2. A. I try to find a compromise solution.
   B. I attempt to deal with all of his and my concerns.

3. A. I am usually firm in pursuing my goals.
   B. I might try to soothe the other's feelings and preserve our relationship.

4. A. I try to find a compromise solution.
   B. I sometimes sacrifice my own wishes for the wishes of the other person.

5. A. I consistently seek the other's help in working out a solution.
   B. I try to do what is necessary to avoid useless tensions.

6. A. I try to avoid creating unpleasantness for myself.
   B. I try to win my position.

7. A. I try to postpone the issue until I have had some time to think it over.
   B. I give up some points in exchange for others.

8. A. I am usually firm in pursuing my goals.
   B. I attempt to get all concerns and issues immediately out in the open.

9. A. I feel that differences are not always worth worrying about.
   B. I make some effort to get my way.

10. A. I am firm in pursuing my goals.
    B. I try to find a compromise solution.

11. A. I attempt to get all concerns and issues immediately out in the open.
    B. I might try to soothe the other's feelings and preserve our relationship.

12. A. I sometimes avoid taking positions which would create controversy.
    B. I will let him have some of his positions if he lets me have some of mine.

13. A. I propose a middle ground.
    B. I press to get my points made.

Union Carbide trial exhibit UC-2546: MSHA National Mine Health and Safety Academy, 'Communications' Draft Cl... Published by AsbestosClaims.Law
ACL Doc 17512 · Page 37 of 74 asbestosclaims.law/library/17512/37

CONFLICT

14. A. I tell him my ideas and ask him for his.
    B. I try to show him the logic and benefits of my position.

15. A. I might try to soothe the other's feelings and preserve our relationship.
    B. I try to do what is necessary to avoid tensions.

16. A. I try not to hurt the other's feelings.
    B. I try to convince the other person of the merits of my position.

17. A. I am usually firm in pursuing my goals.
    B. I try to do what is necessary to avoid useless tensions.

18. A. If it makes the other person happy, I might let him maintain his views.
    B. I will let him have some of his positions if he lets me have some of mine.

19. A. I attempt to get all concerns and issues immediately out in the open.
    B. I try to postpone the issues until I have had time to think it over.

20. A. I attempt to immediately work through our differences.
    B. I try to find a fair combination of gains and losses for both of us.

21. A. In approaching negotiations, I try to be considerate of the other person's wishes.
    B. I always lean toward a direct discussion of the problem.

22. A. I try to find a position that is intermediate between his and mine.
    B. I assert my wishes.

23. A. I am very often concerned with satisfying all our wishes.
    B. There are times when I let others take responsibility for solving the problem.

24. A. If the other's position seems very important to him, I would try to meet his wishes.
    B. I try to get him to settle for a compromise.

25. A. I try to show him the logic and benefits of my position.
    B. In approaching negotiations, I try to be considerate of the other person's wishes.

26. A. I propose a middle ground.
    B. I am nearly always concerned with satisfying all our wishes.

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ACL Doc 17512 · Page 38 of 74 asbestosclaims.law/library/17512/38

CONFLICT

27. A. I sometimes avoid taking positions which would create controversy.
    B. If it makes the other person happy, I might let him maintain his views.

28. A. I am usually firm in pursuing my goals.
    B. I usually seek the other's help in working out a position.

29. A. I propose a middle ground.
    B. I feel that differences are not always worth worrying about.

30. A. I try not to hurt the other's feelings.
    B. I always share the problem with the other person so that we can work it out.

Union Carbide trial exhibit UC-2546: MSHA National Mine Health and Safety Academy, 'Communications' Draft Cl... Published by AsbestosClaims.Law
ACL Doc 17512 · Page 39 of 74 asbestosclaims.law/library/17512/39

SCORING THE CONFLICT MANAGEMENT INSTRUMENT - II

Circle the letters below which you circled on each item of the questionnaire:

	Competing (forcing)	Collaborating (problem-solving)	Compromising (sharing)	Avoiding (withdrawal)	Accommodating (smoothing)
1.				A	B
2.		B	A		
3.	A				B
4.			A		B
5.		A		B	
6.	B			A	
7.			B	A	
8.	A	B			
9.	B			A	
10.	A		B		
11.		A			B
12.			B	A	
13.	B		A		
14.	B	A			
15.				B	A
16.	B				A
17.	A			B	
18.			B		A
19.		A		B	
20.		A	B		
21.		B			A
22.	B		A		
23.		A		B	
24.			B		A
25.	A				B
26.		B	A		
27.				A	B
28.	A	B			
29.			A	B	
30.		B			A

Total number of items circled in each column:

Competing	Collaborating	Compromising	Avoiding	Accommodating

Union Carbide trial exhibit UC-2546: MSHA National Mine Health and Safety Academy, 'Communications' Draft Cl... Published by AsbestosClaims.Law
ACL Doc 17512 · Page 40 of 74 asbestosclaims.law/library/17512/40

CONFLICT

		Competing	Collaborating	Compromising	Avoiding	Accommodating
	100%					
		12		12	12	12
		11	12	11	11	11
		10	11	10	10	10
High					9	9
25%	90%					8
		9	10			
	80%	8		9	8	7
			9			6
	70%	7		8		
					7	
	60%					
		6	8			
				7	6	5
Middle	50%					
50%		5				
	40%		7			
				6	5	4
	30%	4				
			6	5		
	20%	3			4	3
			5	4		
	10%	2			3	
Low			4	3		
25%			3	2	2	2
		1	2	1	1	1
		0	1	1	1	1
	0%		0	0	0	0

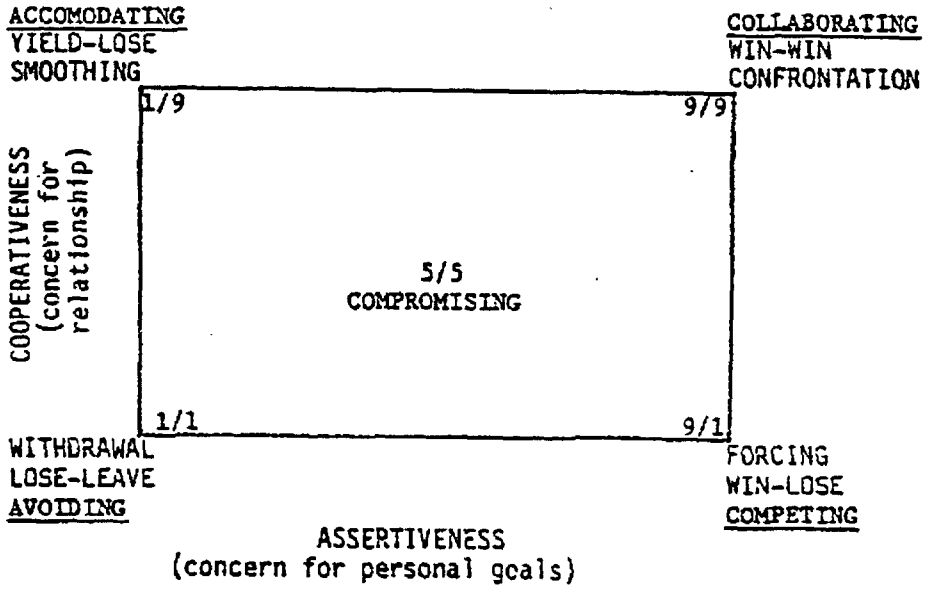
* Scores are graphed in relation to the scores of 399 practicing managers at middle and upper levels in business and government organizations.

Union Carbide trial exhibit UC-2546: MSHA National Mine Health and Safety Academy, 'Communications' Draft Cl... Published by AsbestosClaims.Law
ACL Doc 17512 · Page 41 of 74 asbestosclaims.law/library/17512/41

INTERPRETING YOUR SCORES ON THE CONFLICT MANAGEMENT INSTRUMENT

The Five Conflict Handling Modes

This Conflict Mode Instrument is designed to assess an individual's behavior in conflict situations. "Conflict Situations" are situations in which the concerns of two people appear to be incompatible. In such situations, we can describe a person's behavior along two basic dimensions: (1) assertiveness, the extent to which the individual attempts to satisfy his/her own concerns, and (2) cooperativeness, the extent to which the individual attempts to satisfy the other person's concerns. These two basic dimensions of behavior can be used to define five specific methods of dealing with conflicts. These five "conflict-handling modes" are shown below:



Competing is assertive and uncooperative--an individual pursues his/her own concerns at the other person's expense. This is a power-oriented mode, in which one uses whatever power seems appropriate to win one's own position--one's ability to argue, one's rank, economic sanctions. Competing might mean "standing up for your rights," defending a position which you believe is correct, or simply trying to win.

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ACL Doc 17512 · Page 42 of 74 asbestosclaims.law/library/17512/42

Accomodating is unassertive and cooperative -- the opposite of competing. When accomodating, an individual neglects his own concerns to satisfy the concerns of the other person; there is an element of self-sacrifice in this mode. Accomodating might take the form of selfless generosity or charity, obeying another person's order when one would prefer not to, or yielding to another's point of view.

Avoiding is unassertive and uncooperative -- the individual does not immediately pursue his own concerns or those of the other person. He does not address the conflict. Avoiding might take the form of diplomatically sidestepping an issue, postponing an issue until a better time, or simply withdrawing from a threatening situation.

Collaborating is both assertive and cooperative -- the opposite of avoiding. Collaborating involves an attempt to work with the other person to find a solution which fully satisfies the concerns of both persons. It means digging into an issue to identify the underlying concerns of the two individuals and to find an alternative which meets both sets of concerns. Collaborating between two persons might take the form of exploring a disagreement to learn from each other's insights, concluding to resolve some condition which would otherwise have them competing for resources, or confronting and trying to find a creative solution to an interpersonal problem.

Compromising is intermediate in both assertiveness and cooperativeness. The objective is to find some expedient, mutually acceptable solution which partially satisfies both parties. It falls on a middle ground between competing and accomodating. Compromising gives up more than competing but less than accomodating. Likewise, it addresses an issue more directly than avoiding, but doesn't explore it in as much depth as collaborating. Compromising might mean splitting the difference, exchanging concessions, or seeking a quick middle-ground position.

Interpreting Your Scores

Usually, after getting back the results of any test, people first want to know: "What are the right answers?" In the case of conflict-handling behavior, there are no universal right answers. All five modes are useful in some situations: each represents a set of useful social skills. Our conventional wisdom recognizes, for example, that often "two heads are better than one" (collaborating). But it also says, "Kill your enemies with kindness" (accomodating), "Split the difference" (compromising), "let well enough alone" (avoiding), "might makes right" (competing). The effectiveness of a given conflict-handling mode depends upon the requirements of the specific conflict situation and the skill with which the mode is used.

Union Carbide trial exhibit UC-2546: MSHA National Mine Health and Safety Academy, 'Communications' Draft Cl... Published by AsbestosClaims.Law
ACL Doc 17512 · Page 43 of 74 asbestosclaims.law/library/17512/43

CONFLICT

Each of us is capable of using all five conflict-handling modes: none of us can be characterized as having a single, rigid style of dealing with conflict. However, any given individual uses some modes better than others and therefore, tends to rely upon those modes more heavily than others, whether because of temperament or practice.

The conflict behaviors which an individual uses are therefore, a result of both his/her personal predispositions and the requirements of the situations in which he finds himself. The Conflict Mode Instrument is designed to assess this mix of conflict-handling modes.

To help you judge how appropriate your utilization of the five modes is for your situation, we have listed a number of uses for each mode -- based upon lists generated by company presidents. Your score, high or low, indicates its usefulness in your situation. However, there is the possibility that your social skills lead you to rely upon some conflict behaviors more or less than necessary. To help you determine this, we have also listed some diagnostic questions concerning warning signals for the overuse or underuse of each mode.

A. Competing

Uses:

1. When quick, decisive action is vital -- e.g., emergencies.

2. On important issues where unpopular courses of action need implementing -- e.g., cost cutting, enforcing unpopular rules, discipline.

3. On issues vital to company welfare when you know you're right.

4. To protect yourself against people who take advantage of noncompetitive behavior.

If you scored High:

1. Are you surrounded by "yes men"?
(If so, perhaps it's because they have learned that it's unwise to disagree with you, or have given up trying to influence you. This closes you off from information.)

2. Are subordinates afraid to admit ignorance and uncertainties to you?
(In competitive climates, one must fight for influence and respect -- which means acting more certain and confident than one feels. The upshot

Union Carbide trial exhibit UC-2546: MSHA National Mine Health and Safety Academy, 'Communications' Draft Cl... Published by AsbestosClaims.Law
ACL Doc 17512 · Page 44 of 74 asbestosclaims.law/library/17512/44

2. Continued
is that people are less able to ask for information and opinion -- they are less able to learn.)

If you scored Low:

1. Do you often feel powerless in situations?
(It may be because you are unaware of the power you do have, unskilled in its use, or uncomfortable with the idea of using it. This may hinder your effectiveness by restricting your influence.)

2. Do you have trouble taking a **firm** stand, even when you see the need?
(Sometimes concerns for others' feelings or anxieties about the use of power cause us to vacillate, which may mean postponing the decision and adding to the suffering and/or resentment of others.)

B. Collaborating

Uses:
1. To find an integrative solution when both sets of concerns are too important to be compromised.

2. When your objective is to learn -- e.g., testing your own assumptions, understanding the views of others.

3. To merge insights from people with different perspectives on a problem.

4. To gain commitment by incorporating others' concerns into a consensual decision.

5. To work through hard feelings which have been interfering with an interpersonal relationship.

If you scored High:

1. Do you spend time discussing issues in depth that do not seem to deserve it?
(Collaboration takes time and energy -- perhaps the scarcest organizational resources. Trivial problems don't require optimal solutions, and not all personal difference need to be hashed out. The overuse of collaboration and consensual decision making sometimes represents a desire to minimize risk -- by diffusing responsibility for a decision or by postponing action.)

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ACL Doc 17512 · Page 45 of 74 asbestosclaims.law/library/17512/45

2. Does your collaborative behavior fail to elicit collaborative response from others?
(The exploratory and tentative nature of some collaborative behavior may make it easy for others to disregard collaborative overtures; or the trust and openness may be taken advantage of. You may be missing some cues which would indicate the presence of defensiveness, strong feeling, impatience, competiveness, or conflicting interests.)

If you scored low:

1. Is it hard for you to see differences as opportunities for joint gain -- as opportunities to learn or solve problems?
(Although there are often threatening or unproductive aspects of conflict, indiscriminate pessimism can prevent you from seeing collaborative possibilities and thus deprive you of the mutual gains and satisfactions which accompany successful collaboration.)

2. Are subordinates uncommitted to your decisions or policies?
(Perhaps their own concerns are not being incorporated into those decisions or policies.)

C. Compromising

Uses:
1. When goals are moderately important, but not worth the effort or potential disruption of more assertive modes.

2. When two opponents with equal power are strongly committed to mutually exclusive goals -- as in labor-management bargaining.

3. To achieve temporary settlements to complex issues.

4. To arrive at expedient solutions under time pressure.

5. As a backup mode when collaboration or competition fails to be successful.

If you scored High:

1. Do you concentrate so heavily upon the practicalities and tactics of compromise that you sometimes loose sight of larger issues -- principles, values, long-term objectives, company welfare?

UCC 025189

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ACL Doc 17512 · Page 46 of 74 asbestosclaims.law/library/17512/46

2. Does an emphasis on bargaining and trading create a cynical climate of gamesmanship?
(Such a climate might undermine interpersonal trust and deflect attention away from the merits of the issues discussed.)

If you scored Low:

1. Do you find yourself too sensitive or embarrassed to be effective in bargaining situations?

2. Do you find it hard to make concessions?
(Without this safety valve, you may have trouble getting gracefully out of mutually destructive arguments, power struggles, etc.)

D. Avoiding

Uses: 1. When an issue is trivial, of only passing importance or when other more important issues are pressing.

2. When you perceive no chance of satisfying your concerns -- e.g., when you have low power or you are frustrated by something which would be very difficult to change (national policies, someone's personality structure, etc.)

3. When the potential damage of confronting a conflict outweighs the benefits of its resolution.

4. To let people cool down -- to reduce tensions to a productive level, and to regain perspective and composure.

5. When gathering more information outweighs the advantages of an immediate decision.

6. When others can resolve the conflict more effectively.

7. When the issue seems tangential or symptomatic of another more basic issue.

If you scored High:

1. Does coordination suffer because people have trouble getting your inputs on issues?

2. Does it often appear that people are "walking on eggshells?"
(Sometimes a dysfunctional amount of energy can be

Union Carbide trial exhibit UC-2546: MSHA National Mine Health and Safety Academy, 'Communications' Draft Cl... Published by AsbestosClaims.Law
ACL Doc 17512 · Page 47 of 74 asbestosclaims.law/library/17512/47

2. Continued
devoted to caution and the avoiding of issues, indicating that issues need to be faced and resolved.)

3. Are decisions on important issues made by default?

If you scored Low:

1. Do you find yourself hurting peoples' feelings or stirring up hostilities?
(You may need to exercise more discretion in confronting issues or more tact in framing issues in nonthreatening ways. Tact is partially the art of avoiding potentially disruptive aspects of an issue)

2. Do you often feel harried or overwhelmed by a number of issues?
(You may need to devote more time to setting priorities -- deciding which issues are relatively unimportant, and perhaps delegating them to others.)

E. Accomodating

Uses: 1. When you realize that you are wrong -- to allow a better position to be heard, to learn from others, and to show that you are reasonable.

2. When the issue is much more important to the other person than to yourself -- to satisfy the needs of others, and as a goodwill gesture to help maintain a cooperative relationship.

3. To build up social credits for later issues which are important to you.

4. When continued competition would only damage your cause -- when you are outmatched and losing.

5. When preserving harmony and avoiding disruption are especially important.

6. To aid in the managerial development of subordinates by allowing them to experiment and learn from their own mistakes.

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Published by AsbestosClaims.Law
ACL Doc 17512 · Page 48 of 74
asbestosclaims.law/library/17512/48

CONFLICT

If you scored High:

1. Do you feel that your own ideas and concerns are not getting the attention they deserve? (Deferring too much to the concerns of others can deprive you of influence, respect, and recognition. It also deprives the organization of your potential contributions.)

2. Is discipline lax? (Although discipline for its own sake may be of little value, there are often rules, procedures, and assignments whose implementation is crucial for you or the organization.)

If you scored Low:

1. Do you have trouble building goodwill with others? (Accomodation on minor issues which are important to others are gestures of goodwill.)

2. Do others often seem to regard you as unreasonable?

3. Do you have trouble admitting it when you are wrong?

4. Do you recognize legitimate exceptions to rules?

5. Do you know when to give up?

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ACL Doc 17512 · Page 49 of 74 asbestosclaims.law/library/17512/49

INSPECTOR IMAGE

Circle the number that represents how you think the ideal inspector should be perceived. Mark in the direction, toward either end of the scale, that is most compatible with your perceptions. Circle only one number per scale and complete all scales. Please give an honest, frank response. There are no right or wrong answers.

Expert	7	6	5	4	3	2	1	Inexpert
Unintelligent	1	2	3	4	5	6	7	Intelligent
Narrow	1	2	3	4	5	6	7	Intellectual
Qualified	7	6	5	4	3	2	1	Unqualified
								Total _____
Nervous	1	2	3	4	5	6	7	Poised
Tense	1	2	3	4	5	6	7	Relaxed
Calm	7	6	5	4	3	2	1	Anxious
Excitable	1	2	3	4	5	6	7	Composed
								Total _____
Honest	7	6	5	4	3	2	1	Dishonest
Unfair	1	2	3	4	5	6	7	Fair
Considerate	7	6	5	4	3	2	1	Cruel
Undependable	1	2	3	4	5	6	7	Responsible
								Total _____
Bold	7	6	5	4	3	2	1	Timid
Quiet	1	2	3	4	5	6	7	Verbal
Silent	1	2	3	4	5	6	7	Talkative
Aggressive	7	6	5	4	3	2	1	Meek
								Total _____
Awful	1	2	3	4	5	6	7	Nice
Unpleasant	1	2	3	4	5	6	7	Pleasant
Irritable	1	2	3	4	5	6	7	Good Natured
Cheerful	7	6	5	4	3	2	1	Gloomy
								Total _____

UCC 025181

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ACL Doc 17512 · Page 50 of 74 asbestosclaims.law/library/17512/50

INSPECTOR IMAGE

In order to become an effective health and safety professional, the inspector must consider how he presents himself with respect to his credibility, attraction and power.

CREDIBILITY

There are five important dimensions which affect an inspector's perceived credibility: competence, composure, character, extroversion, and sociability.

The perception of competence is highly evaluative. Each of us tends to use ourselves as a measuring guide. Anyone who appears as intelligent or more intelligent than us, we call competent. Anyone who appears less intelligent, we classify as incompetent.

Although an inspector should never appear incompetent, the level of his perceived competence should vary according to the individual with whom he is dealing. If he appears "too smart" to the mine operator, chances are good that the operator will feel uncomfortable in his presence or perhaps even become defensive.

Being composed does not imply that an inspector should completely lack emotions.

To appear emotionless causes others to avoid his presence. It does imply that the inspector should maintain his poise and remain relaxed and in control, even in difficult situations.

Character is a very important dimension in the preception of an inspector. Perceived lack of integrity or honesty causes others to discount any safety messages that are sent.

Extroversion and sociability are also important dimension of credibility, which are much less evaluative than the others mentioned before. Introversion is often interpreted as a lack of self esteem. Too much extroversion is also seen negatively, however.

Although it is important for an inspector to appear social, too much sociability causes him to lose his ability to direct and control. Also, as perceived sociability goes up, perceived competence goes down.

UCC 025179

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ACL Doc 17512 · Page 51 of 74 asbestosclaims.law/library/17512/51

INSPECTOR IMAGE

ATTRACTION

Attraction is an important, often neglected, aspect of communication. In fact, research has shown that probably the single most important element in first impressions is physical attraction. Although an inspector may or may not be physically attractive to operators and workers, he probably should not be haphazard about his dress and appearance.

Attraction also takes two other forms: social and task. It is important that inspectors try to be attractive to others in at least one of these three ways, preferably in all three ways.

POWER

An inspector obviously has legitimate power. The coercive power which is vested in him by law should not, however, be his sole source of power. Another source of legitimate power is recognized expertise. Anytime mine management perceives that an inspector has knowledge or experience which can benefit him, he is much more apt to attribute status to that inspector.

Yet another way in which inspectors can achieve power is by being in a position to give rewards for desired behavior. The reward does not have to be money as many persons construe. It may take the form of written or spoken praise.

Another way of achieving status or power is by establishing oneself as a person to be looked up to. It is called referent power. Most people will willingly follow suggestions of others for whom they have a great deal of respect.

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ACL Doc 17512 · Page 52 of 74 asbestosclaims.law/library/17512/52

INSPECTOR ROLES

Tough Guy

This image is often projected by beginning inspectors. He believes the only legal way to achieve a safe and healthful environment is to enforce the law strictly. He often plays a numbers game. More written violations are equated to a more thorough inspection.

Underneath such an image is usually an insecure person who is not sure he is able to cope with the inspection situation. In order to compensate for his own basic insecurity, the inspector who tries to project the tough guy image makes a big thing out of how thoroughly he can control the mine managers. Operators are made to feel that if they get out of line, punishment will surely follow. Communication is normally strained and primarily one-way. Communication is probably a misnomer for what takes place between the tough guy and the operator; the tough guy wants no communication and usually gets very little. The operator may comply with the tough guy, but there will probably be little carry over with compliance when the inspector is not on the property.

Everybody's Buddy

More than anything else this inspector wants to be liked. He believes the way to achieve a safe and healthful mine environment is to establish good relations so the operator will want to comply with the regulations. Therefore, he is apt to overlook many minor violations in order to establish a smooth relationship with mine management. He is apt to be extroverted and highly social.

Often the "everybody's buddy" inspector is taken advantage of by mine management. Management may try to get away with existing violations. Another problem may be that accidents often occur from "minor" hazards which were not corrected.

The Genius

The inspector who presents this image tries to impress everyone with his vast knowledge. He believes the way to achieve a safe and healthful mine environment is to appear highly competent so that others will follow his directions. Often, people who try to project this image are generally not all that bright, and others quickly see through the facade.

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ACL Doc 17512 · Page 53 of 74 asbestosclaims.law/library/17512/53

SELF-FULFILLING PROPHECY

THE SELF-FULFILLING PROPHECY: PYGMALION EFFECT

List the first five thoughts that come to your mind as you look at each word below:

MSHA

UNION

MANAGEMENT

UCC 025173

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ACL Doc 17512 · Page 54 of 74 **asbestosclaims.law/library/17512/54**

SELF-FULFILLING PROPHECY

CONCEPT: The power of expectation alone can influence the behavior of others.

Most of us influence each other in more ways than we may be aware. Our expectations can cause others to change their behavior. This idea is known as a self-fulfilling prophecy.

This influence has been demonstrated on many different occasions. In one case a welding teacher was told that five of his trainees had great potential in welding. At the end of the training program these five (who had been chosen at random) were significantly better welders than another group about whose potential nothing was said.

The inspector can communicate his expectations to mine personnel both verbally and nonverbally. The nonverbal messages are delivered unintentionally and are difficult to hide. Some examples of nonverbal activities are tone of voice, posture, facial expressions, gestures, and eye contact. The inspector should work to assure that his nonverbal messages show high expectations of mine personnel.

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ACL Doc 17512 · Page 55 of 74 asbestosclaims.law/library/17512/55

SELF-FULFILLING PROPHECY

There are four areas in which the inspector can use the Pygmalion effect to influence others. He should try to develop these so that he can have a positive effect on mine personnel.

1. The inspector must believe that he can definitely improve mine safety and health.

2. The inspector must believe that he has the ability to influence mine personnel to be enthusiastic about making changes.

3. The inspector must communicate that safety and health changes are achievable and beneficial to the mine.

4. The inspector must find opportunities to show mine management where changes have improved health and safety and been profitable to the mine.

UCC 025169

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Published by AsbestosClaims.Law
ACL Doc 17512 · Page 56 of 74
asbestosclaims.law/library/17512/56

MASLOW

Below are summarized some of the important ideas in A.H. Maslow's theory of human motivation.

1. Motivation is an internal state. Motivation cannot be imposed upon an individual from outside, but is the result of some unsatisfied need.

2. There are five types of goals or needs that are motivators of humans. Four of these are classified as *deficit needs*, and one is termed a *growth need*. The deficit need classifications are: physiological, safety, social, and esteem. The growth need Maslow called self actualization.

3. Maslow described these sets of needs as follows:

   Physiological - Man has an innate need to have food, water, shelter, oxygen, etc. These needs are basic and must be largely met before he can be concerned about any other level of need. For example, a man whose hunger needs are rarely fulfilled will probably expend most of his conscious energy in seeking food rather than some other activity.

   Safety/security - Once most of his physiological needs are largely met, man begins then to be motivated to insure that the satisfaction of those needs will continue into the future.

   Social - This category is descriptive of man's desire to be included or accepted as a member of a group. It describes his need for friendship and interaction with other humans.

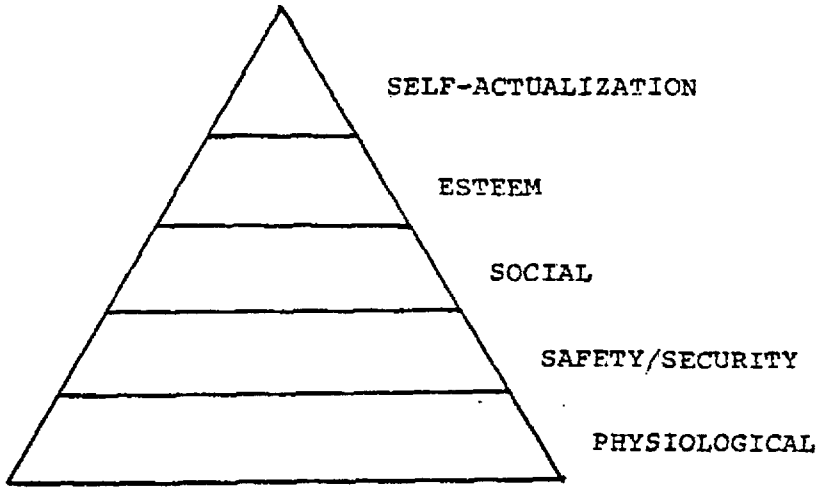
   Esteem - This set of needs is concerned with man's desire for a good self-image. Man needs to respect himself and be respected by others.

   Self-actualization - This is the growth need described by Maslow. Once many of his deficit needs are satisfied, man needs to develop to his highest potential, to search for new challenges, new goals, or new means of self-expression.

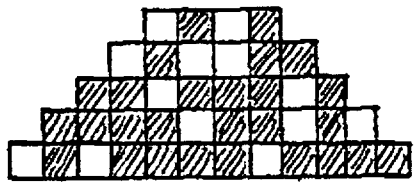
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ACL Doc 17512 · Page 57 of 74 asbestosclaims.law/library/17512/57

MASLOW

4. These categories of needs can be arranged in a heirarchical structure. Maslow said that "Man is an ever-wanting animal." As man's more basic needs are largely satisfied, higher level needs begin to emerge.



5. No one level of needs has to be completely satisfied before needs of a higher level will emerge. The typical person in our society is partially satisfied and partially unsatisfied in all his wants. A diagram for an individual may look something like this.



6. Any thwarting of the satisfaction of the basic goals or needs, is seen as a psychological threat.

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ACL Doc 17512 · Page 58 of 74
asbestosclaims.law/library/17512/58

MASLOW

PHYSIOLOGICAL NEEDS

Food
Water
Air
Shelter
Sex
Heat
Air Conditioning
Physical Activity
Mental Activity

SAFETY/SECURITY NEEDS

Security
Stability
Dependency
Protection
Freedom from Fear
Freedom from Anxiety
Freedom from Chaos
Structure
Order
Law
Limits

SOCIAL NEEDS

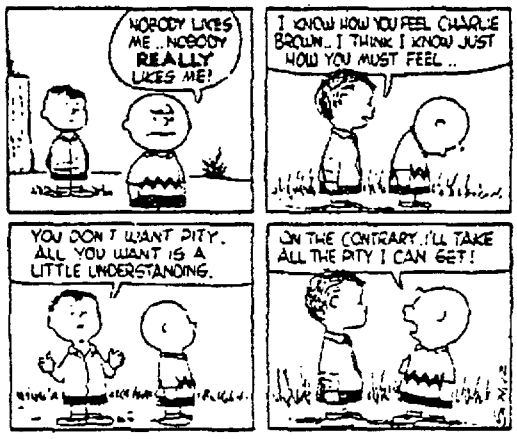
Love
Affection
Being Wanted
Belongingness
Togetherness
Acceptance
Family
Friends

ESTEEM NEEDS

High Evaluation of Self
Self-respect
Self-esteem
Esteem of Others
Personal Worth
Self-confidence
Desire for Strength
Desire for Adequacy
Desire for Mastery
Desire for Competence
Desire for Independence
Desire for Freedom
Desire for Reputation
Desire for Prestige
Desire for Status
Desire for Fame
Desire for Glory
Desire for Dominance
Desire for Recognition
Desire for Attention
Desire for Importance
Desire for Dignity
Desire for Appreciation

SELF-ACTUALIZATION NEEDS

Self-fulfillment
Self-development
Creativity



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Published by AsbestosClaims.Law
ACL Doc 17512 · Page 59 of 74
asbestosclaims.law/library/17512/59

DO YOU WANT TO KNOW MORE ABOUT YOURSELF?

Before seeing the film, you are invited to spend a few minutes responding to the statements on the next page.

INSTRUCTIONS:

1. Please read each statement carefully.
2. To indicate where you stand on that statement, place an X at the appropriate place along the line scale below each statement.
3. Respond quickly to all statements. Work rapidly. Do not go back.

The exercise should give you some interesting additional information about yourself.

SAMPLE STATEMENT AND RESPONSE:

Most people spend too much time watching TV, going to movies, camping, etc., instead of improving themselves by reading good books, taking educational courses, attending lectures, etc.

strongly disagree	moderately disagree	tend to disagree	tend to agree	moderately agree	strongly agree
			X		

Place an X on the line under the words which best show where you stand on the above statement. There are no "right" or "wrong" answers. If you tend to agree with the above statement, mark X as shown above. *Please turn the page.* Carefully read each question.

Union Carbide trial exhibit UC-2546: MSHA National Mine Health and Safety Academy, 'Communications' Draft Cl... Published by AsbestosClaims.Law
ACL Doc 17512 · Page 60 of 74 asbestosclaims.law/library/17512/60

1. Things usually work out for me. I always seem to have enough clothes, enough money for rent, food, and car, and to put aside for savings.

strongly disagree	moderately disagree	tend to disagree	tend to agree	moderately agree	strongly agree
_____	_____	_____	_____	_____	_____

2. I usually try to avoid discussions with people unless I feel they know as much or more about the subject than I do.

strongly disagree	moderately disagree	tend to disagree	tend to agree	moderately agree	strongly agree
_____	_____	_____	_____	_____	_____

3. I get rather upset with people for engaging in small talk. People ought to be able to get together just to be together, just because they want to, without having anything special to talk about.

strongly disagree	moderately disagree	tend to disagree	tend to agree	moderately agree	strongly agree
_____	_____	_____	_____	_____	_____

4. In a recent newspaper article, a UCLA senior was described as being "elated" with his job as bat boy for the Dodgers. I understand how he feels.

strongly disagree	moderately disagree	tend to disagree	tend to agree	moderately agree	strongly agree
_____	_____	_____	_____	_____	_____

5. I don't pay too much attention to people who criticize me or put me down. That's their problem.

strongly disagree	moderately disagree	tend to disagree	tend to agree	moderately agree	strongly agree
_____	_____	_____	_____	_____	_____

6. Fairly often I become aware that I have taken on too much just because other people have asked me to do things. I seem to have difficulty saying "no" to people I know.

strongly disagree	moderately disagree	tend to disagree	tend to agree	moderately agree	strongly agree
_____	_____	_____	_____	_____	_____

7. People who believe that money is to be spent and enjoyed are rather irresponsible and immature.

strongly disagree	moderately disagree	tend to disagree	tend to agree	moderately agree	strongly agree
_____	_____	_____	_____	_____	_____

UCC 025159

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ACL Doc 17512 · Page 61 of 74
asbestosclaims.law/library/17512/61

8. It may appear a bit strange in our U.S. culture, but somehow the things we work hard for—a high salary, a nice position, security, a home, a satisfying love relationship, etc.—just don't seem to be enough. I occasionally find myself wishing for something I could get completely involved in, something important, something I could feel good about while I was doing it.

strongly disagree	moderately disagree	tend to disagree	tend to agree	moderately agree	strongly agree
_____	_____	_____	_____	_____	_____

9. Some people have a hard time thinking of anything appropriate to talk about when they first enter a new or strange group of people. I don't have that problem. I enjoy meeting and talking with strangers or a new group.

strongly disagree	moderately disagree	tend to disagree	tend to agree	moderately agree	strongly agree
_____	_____	_____	_____	_____	_____

10. A lot of people try to avoid disagreement and conflict. Not me. I enjoy a good argument. I don't care who it's with.

strongly disagree	moderately disagree	tend to disagree	tend to agree	moderately agree	strongly agree
_____	_____	_____	_____	_____	_____

11. It's hard for me to have much sympathy for old people who are completely dependent on welfare. They should have planned ahead and saved when they were younger.

strongly disagree	moderately disagree	tend to disagree	tend to agree	moderately agree	strongly agree
_____	_____	_____	_____	_____	_____

12. Losing in any kind of sport or game really doesn't bother me much.

strongly disagree	moderately disagree	tend to disagree	tend to agree	moderately agree	strongly agree
_____	_____	_____	_____	_____	_____

13. Wishy washy people bug me. I have no use for them.

strongly disagree	moderately disagree	tend to disagree	tend to agree	moderately agree	strongly agree
_____	_____	_____	_____	_____	_____

14. Traditions are very useful for me because they tell me what is expected of me and what I should do.

strongly disagree	moderately disagree	tend to disagree	tend to agree	moderately agree	strongly agree
_____	_____	_____	_____	_____	_____

UCC 025157

Union Carbide trial exhibit UC-2546: MSHA National Mine Health and Safety Academy, 'Communications' Draft Cl...
Published by AsbestosClaims.Law
ACL Doc 17512 · Page 62 of 74
asbestosclaims.law/library/17512/62

15. The old admonition to save 10% out of each paycheck is very sound advice and should be given high priority by everyone.

strongly disagree	moderately disagree	tend to disagree	tend to agree	moderately agree	strongly agree
_____	_____	_____	_____	_____	_____

16. I have great admiration for people, especially teenagers, who suffer a severe physical injury and then overcome it. I'm afraid I might give up.

strongly disagree	moderately disagree	tend to disagree	tend to agree	moderately agree	strongly agree
_____	_____	_____	_____	_____	_____

17. I've heard people talk about getting caught up by the vastness of space, or the beauty of a rainbow, or something special in a dewdrop on a blade of grass, and so on. Those things sound nice. I have had a few experiences like that and would give a lot to have more.

strongly disagree	moderately disagree	tend to disagree	tend to agree	moderately agree	strongly agree
_____	_____	_____	_____	_____	_____

18. I can't understand why some people—like Marilyn Monroe or Ernest Hemingway, for example—who have everything going for them, commit suicide.

strongly disagree	moderately disagree	tend to disagree	tend to agree	moderately agree	strongly agree
_____	_____	_____	_____	_____	_____

19. I hear that it really upsets some managers when they have to fire an employee. I understand their feelings.

strongly disagree	moderately disagree	tend to disagree	tend to agree	moderately agree	strongly agree
_____	_____	_____	_____	_____	_____

20. People who don't hold steady regular jobs, but, instead, get mixed up with meditation, development of their potential, go to weekend retreats, read about Eastern religions, etc., often receive a lot of criticism. I may not fully understand what they are after, but I really rather admire them and sometimes wish I had the nerve to break away and out.

strongly disagree	moderately disagree	tend to disagree	tend to agree	moderately agree	strongly agree
_____	_____	_____	_____	_____	_____

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Published by AsbestosClaims.Law
ACL Doc 17512 · Page 63 of 74
asbestosclaims.law/library/17512/63

21. Many people are so thin-skinned and sensitive that I get disgusted and fed up with them.

strongly disagree	moderately disagree	tend to disagree	tend to agree	moderately agree	strongly agree
_____	_____	_____	_____	_____	_____

22. Some people I know get put down a lot – fairly often and by different people. Fortunately, that doesn't happen to me. I get a fair amount of support from others.

strongly disagree	moderately disagree	tend to disagree	tend to agree	moderately agree	strongly agree
_____	_____	_____	_____	_____	_____

23. People who are string savers – that is, who save little things rather than discard them and buy new ones when needed – should be admired and respected and copied.

strongly disagree	moderately disagree	tend to disagree	tend to agree	moderately agree	strongly agree
_____	_____	_____	_____	_____	_____

24. I really don't understand people who join clubs, the PTA, and other groups and organizations but then don't take an active part in them.

strongly disagree	moderately disagree	tend to disagree	tend to agree	moderately agree	strongly agree
_____	_____	_____	_____	_____	_____

Now tabulate your answers on the scoring sheet.

SUGGESTION:

Group your answers to each level of need into sets (draw a large circle around the area into which most of your answers fall). If most of your answers in any area fall left of the center, your needs in that particular area are relatively weak. If they fall right of center, then they are relatively strong.

UCC 025153

Union Carbide trial exhibit UC-2546: MSHA National Mine Health and Safety Academy, 'Communications' Draft Cl... Published by AsbestosClaims.Law
ACL Doc 17512 · Page 64 of 74 asbestosclaims.law/library/17512/64

63

UCC 025151

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MCGREGOR'S THEORY X THEORY Y MODEL

by

Albert J. Robinson

The first acquaintance with "X" and "Y" for many of us was as unknowns in Algebra I. During the decade of the sixties "X" and "Y" took on some additional meanings for readers in the behavior sciences and contemporary management thinking.

In 1960, Douglas McGregor published his The Human Side of Enterprise. This was to be a major force in the application of behavioral science to management's attempts to improve productivity in organizations. McGregor was trying to stimulate people to examine the reasons underlying the way they tried to influence human activity, particularly at work. He saw management thinking and activity as based on two very different sets of assumptions about people. These sets of assumptions, called X and Y, have come to be applied to management styles; e.g. an individual is a theory X manager or a theory Y manager.

McGregor looked at the various approaches to managing people in organizations - not only industrial organizations but others as well - services, schools, and public agencies and concluded that the styles or approaches to management used by people in positions of authority could be examined and understood in light of those manager's assumptions about people. He suggested that a manager's effectiveness or ineffectiveness lay in the very subtle, frequently unconscious effects of these assumptions on his attempts to manage or influence others.

As he looked at the behaviors, structures, systems, and policies set up in some organizations, he found them contrary to information coming out of research at that time: information about human behavior and the behavior of people at work. It appeared that management was based on ways of looking at people that did not agree with what behavioral scientists knew and were learning about people as they went about their work in some, or perhaps more organizations.

THEORY X

The traditional view of man, widely held, was labeled "X" and seemed to be based on the following set of assumptions:

1. The average human being has an inherent dislike for work and will avoid it if he can.

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ACL Doc 17512 · Page 66 of 74 asbestosclaims.law/library/17512/66

2. Because of this human characteristic of dislike for work, most people must be coerced, controlled, or threatened with punishment to get them to put forth adequate effort toward the achievement of organizational objectives.

3. The average human being prefers to be directed, wishes to avoid responsibility, has relatively little ambition, and wants security above all.

Of course, these assumptions aren't set out or stated, but if we examine how organizations are structured and policies, procedures, and work rules established, we can see them operating. Job responsibilities are closely spelled out, goals are imposed without individual employee involvement or consideration, reward is contingent on working within the system, and punishment falls on those who deviate from the rules as established. These factors all influence how people respond, but the underlying assumptions or reasons for them are seldom tested or even recognized as assumptions. The fact is that most people act as if their beliefs about human nature were correct and require no study or checking.

This set of assumptions about people may result in very contrasting styles of management. We may see a "hard" or a "soft" approach to managing, but both approaches will be based on these ideas set out above. One theory "X" manager may drive his men at their work because he thinks that they are lazy and that this is the only way to get things done. Another may look at his men in the same way, but he may think the way to get lazy people to work is to be nice to them, to coax productive activity out of them.

This view of man was characteristic of the first half of the twentieth century, which had seen the effect of Frederick Taylor's scientific management school of thought. His focus had been on man as an aspect of the productive cycle much like that of a piece of machinery, and it had allowed for advances in productivity. Yet it was out of this managerial climate that tended to view man as an interchangeable part of a machine - as a machine element that was set in motion by the application of external forces - that the "human relations" view grew and the behavioral science school developed.

I must hasten to add that the application of understanding of human behavior from the behavioral sciences is not an extension of the human relations focus of the 1940's and 1950's. These two grew up separately. One might construe that the human relations view of handling people prevalent at that time was manipulative and merely a "soft" theory "X" approach.

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ACL Doc 17512 · Page 67 of 74 asbestosclaims.law/library/17512/67

THEORY Y

Another view of man not necessarily the opposite extreme of "X" was called "Y" or theory "Y". This set of assumptions about the nature of man which influenced manager behaviors is set out below.

1. The expenditure of physical and mental effort in work is as natural as play or rest.

2. External control and threat of punishment are not the only means for bringing about effort toward organizational objectives. Man will exercise self-control in the service of objectives to which he is committed.

3. Commitment to objectives is dependent on rewards associated with their achievement. The most important rewards are those that satisfy needs for self-respect and personal improvement.

4. The average human being learns, under proper conditions, not only to accept, but to seek responsibility.

5. The capacity to exercise a relatively high degree of imagination, ingenuity, and creativity in the solution of organizational problems is widely, not narrowly, distributed in the population.

6. Under the conditions of modern industrial life, the intellectual potentialities of the average human being are only partially utilized.

It is important to realize that this is not a soft approach to managing human endeavor. Examined closely it can be seen as a very demanding style; it sets high standards for all and expects people to reach for them. It is not only hard on the employee who may not have had any prior experience with the managerial behaviors resulting from these assumptions but it also demands a very different way of acting from the supervisor or manager who has grown up under at least some of the theory X influences in our culture. While we can intellectually understand and agree with some of these ideas, it is far more difficult to put them into practice. Risk-taking is necessary on the part of the manager, for he must allow employees or subordinates to experiment with activities for which he may feel they do not presently have the capability. The learning and growth resulting from the opportunity may handsomely reward the risk.

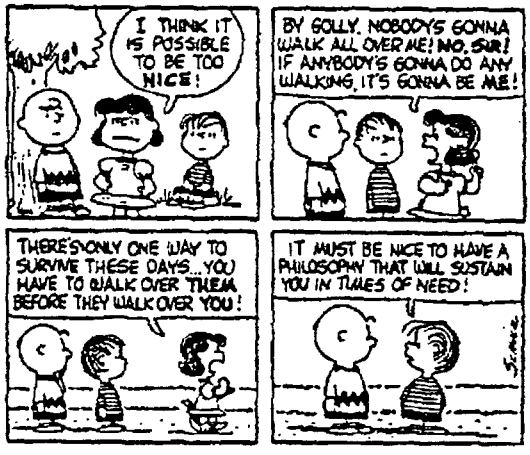
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ACL Doc 17512 · Page 68 of 74 asbestosclaims.law/library/17512/68

THEORY X/THEORY Y

The focus of a Y manager is on man as a growing, developing, learning being, while an X manager views man as static, fully developed, and capable of little change. A theory X manager sets the parameters of his employees' achievements by determining their potentialities in light of negative assumptions. A theory Y manager allows his people to test the limits of their capabilities and uses errors for learning better ways of operating rather than as clubs for forcing submission to the system. He structures work so that an employee can have a sense of accomplishment and personal growth. The motivation comes from the work itself and provides a much more powerful incentive than the "externals" of theory X.

A suggestion for your consideration is to make the same assumptions about the others that you make about yourself, and then act in the appropriate manner. You might be pleasantly surprised.

Albert J. Robinson



Union Carbide trial exhibit UC-2546: MSHA National Mine Health and Safety Academy, 'Communications' Draft Cl...
Published by AsbestosClaims.Law
ACL Doc 17512 · Page 69 of 74
asbestosclaims.law/library/17512/69

THEORY X AND THEORY Y

Directions: The following are various types of behavior in which a supervisor (manager, leader) may engage in relation to subordinates. Read each item carefully and then put a check mark in one of the columns to indicate what you would do.

If I were a supervisor, I would:	Make a Great Effort To Do This	Tend To Do This	Tend To Avoid Doing This	Make a Great Effort To Avoid Doing This
1. Closely supervise my subordinates in order to get better work from them.	____	____	____	____
2. Set the goals and objectives for my subordinates and sell them on the merits of my plan.	____	____	____	____
3. Set up controls to assure that my subordinates are getting the job done.	____	____	____	____
4. Encourage my subordinates to set their own goals and objectives.	____	____	____	____
5. Make sure that my subordinates' work is planned out for them.	____	____	____	____
6. Check with my subordinates daily to see if they need any help.	____	____	____	____

UCC 025143

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ACL Doc 17512 · Page 70 of 74 asbestosclaims.law/library/17512/70

THEORY X/THEORY Y

If I were a supervisor, I would:	Make a Great Effort To Do This	Tend To Do This	Tend To Avoid Doing This	Make A Great Effort To Avoid Doing This
7. Step in as soon as reports indicate that the job is slipping.	____	____	____	____
8. Push my people to meet schedules if necessary.	____	____	____	____
9. Have frequent meetings to keep in touch with what is going on.	____	____	____	____
10. Allow subordinates to make important decisions.	____	____	____	____

UCC 025141

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ACL Doc 17512 · Page 71 of 74 asbestosclaims.law/library/17512/71

THEORY X/THEORY Y

Indicate on the scale below where you would classify your own basic attitudes toward your subordinates in terms of McGregor's Theory X and Theory Y.

Theory X — Theory Y

10 — 20 — 30 — 40



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ACL Doc 17512 · Page 72 of 74 asbestosclaims.law/library/17512/72

REFERENCES AND SUGGESTED READING

Berlo, David K. The Process of Communication. New York: Holt, Rinehart, Wilson, 1960

Burgoon, Judee K. and Saine, Thomas. The Unspoken Dialoque: An Introduction to Nonverbal Communication, Boston: Houghton Mifflin Company, 1978

Campbell, J.H. and Hepler, H.W. Dimensions in Communications. Belmont, California: Readings, Wadsworth Publishing Company, Inc., 1970

Chapman, Elwood N. Your Attitude is Showing, A Primer on Human Relations. Palo Alto, California: Science Research Associates, Inc., 1977

Davis, Keith. Human Relations at Work. New York: McGraw-Hill, Inc., 1962

Egan, Gerard. Interpersonal Living. Belmont, California: Wadsworth Publishing Company, Inc., 1976

Eisenberg, A.M. and Smith, R.R. Non-Verbal Communications. Indianapolis: Bobbs-Merrill Educational Publishing, 1971

Filley, A.C. Interpersonal Conflict Resolution. Glenview, Ill: Scott Foreman and Company, 1975

Gellerman, Saul W. The Management of Human Relations. New York: Holt, Rhinehart and Winston, Inc., 1966

Giffin, K. and Patton, B.R. Basic Readings in Interpersonal Communication. New York: Harper and Row, 1976

Haney, W. V. Communications and Organizational Behavior. Homewood, Ill: Richard D. Irwin, Inc., 1975

Hayakawa, S.I. Language in Action. New York: Harcourt, Brace and Company, 1941

Hurt, H. Thomas, Scott, Michael D., and McCroskey, James C. Communication in the Classroom. Reading, MA: Addison-Wesley, 1978

UCC 025138

Union Carbide trial exhibit UC-2546: MSHA National Mine Health and Safety Academy, 'Communications' Draft Cl... Published by AsbestosClaims.Law
ACL Doc 17512 · Page 73 of 74 asbestosclaims.law/library/17512/73

REFERENCES AND SUGGESTED READING

Leavitt, Harold J. Managerial Psychology. Chicago: University of Chicago Press, 1964

Maslow, Abraham H. Motivation and Personality. New York: Harper and Brothers, 1954

McGregor, Douglas. The Human Side of Enterprise. New York: McGraw-Hill Book Company, Inc., 1960

McGregor, Douglas (Edited by Bennis, Warren G. and McGregor, Caroline.) The Professional Manager. New York: McGraw-Hill, 1967

Mehrabian, A. Silent Messages. Belmont, California: Wadsworth Publishing Company, Inc., 1971

Pfeiffer, J. William and Jones, John E., editors. The 1972 Annual Handbook for Group Facilitators. LaJolla, California: Published by the University Assoicates, 1972

Postman, Neil Language and Reality. New York: Holt, Rhinehart and Winston, Inc., 1967

Quick, Thomas L. Understanding People at Work. New York: Executive Enterprise Publications Company, Inc., 1976

Scott, Michael D. and Powers, William G. Interpersonal Communication: A Question of Needs. Boston: Houghton Mifflin Company, 1978

Steinfett, T.M. Human Communication, An Interpersonal Introduction. Bobbs Merrill Educational Publishing, Indianapolis, 1977

Wilmot, W.W. Dyadic Communication: A Transactional Perspective. Reading, MA: Addison-Wesley Publishing Company, 1975

UCC 025137

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ACL Doc 17512 · Page 74 of 74 asbestosclaims.law/library/17512/74