mehrabian's communication research

Professor Albert Mehrabian's communications model

Professor Albert Mehrabian has pioneered the understanding of communications since the 1960s. He received his PhD from Clark University and in 1964 commenced an extended career of teaching and research at the University of California, Los Angeles. He currently devotes his time to research, writing, and consulting as Professor Emeritus of Psychology, UCLA. Mehrabian's work featured strongly (mid-late 1900s) in establishing early understanding of body language and non-verbal communications.

Aside from his many and various other fascinating works, Mehrabian's research provided the basis for the widely quoted and often much over-simplified statistic for the effectiveness of spoken communications.

Here is a more precise (and necessarily detailed) representation of Mehrabian's findings than is typically cited or applied:

- 7% of message pertaining to feelings and attitudes is in the words that are spoken.
- 38% of message pertaining to feelings and attitudes is paralinguistic (the way that the words are said).
- 55% of message pertaining to feelings and attitudes is in facial expression.

The following is a more common and over-simplified interpretation of Mehrabian's findings, which is quoted and applied by many people to cover all communications - often without reference to Mehrabian, although Mehrabian's work is the derivation.

It is understandable that many people prefer short concise statements, however if you must use the simplified form of the Mehrabian formula you must explain the context of Mehrabian's findings. As a minimum you must state that the formula applies to communications of feelings and attitudes.

Here's the overly-simplistic interpretation. Where you see or use it, qualify it, in proper context.

- 7% of meaning in the words that are spoken.
- 38% of meaning is paralinguistic (the way that the words are said).
- 55% of meaning is in facial expression.

Other important contextual and qualifying details are:

Mehrabian did not intend the statistic to be used or applied freely to all communications and meaning.

Mehrabian provides this useful explanatory note (from his own website www.kaaj.com/psych, retrieved 29 May 2009):

"...Inconsistent communications - the relative importance of verbal and nonverbal messages: My findings on this topic have received considerable attention in the literature and in the popular
Silent Messages' [Mehrabian's key book] contains a detailed discussion of my findings on inconsistent messages of feelings and attitudes (and the relative importance of words vs. nonverbal cues) on pages 75 to 80.

Total Liking = 7% Verbal Liking + 38% Vocal Liking + 55% Facial Liking

Please note that this and other equations regarding relative importance of verbal and nonverbal messages were derived from experiments dealing with communications of feelings and attitudes (i.e., like-dislike). Unless a communicator is talking about their feelings or attitudes, these equations are not applicable. Also see references 286 and 305 in Silent Messages - these are the original sources of my findings...

(Albert Mehrabian, source www.kaaj.com/psych, retrieved 29 May 2009)

The 'Mehrabian formula' (7%/38%/55%) was established in situations where there was incongruence between words and expression.

That is, where the words did not match the facial expression: specifically in Mehrabian's research people tended to believe the expression they saw, not the words spoken.

tips on explaining context and application of mehrabian's formula

Notwithstanding all this background and qualification, Mehrabian's model has become one of the most widely referenced statistics in communications.

You will continue to see it referenced, and you will probably use it yourself, not always in its purest form, and not always with reference to its originator.

The essence of the model - even when used in overly simplistic form - is powerful and generally helpful, and certainly better than placing undue reliance on words alone for conveying (receiving and sending) communications, especially those which carry potentially emotional implications.

So, subject to suitable qualification and explanation, Mehrabian's findings and the theory resulting from them, are particularly useful in explaining the importance of understanding meaning in communications as distinct from words alone.

Here are a couple of simple ways to begin to qualify the interpretation and application of the formula:

You must first clarify that the Mehrabian formula often quoted out of context and too generally.

For example, the spoken instruction, "Everyone evacuate the building because there is a fire," carries 100% of the meaning in the words: i.e., 1) there is a fire, and 2) get the hell out of here. The tone of voice and body language might additionally indicate how far ahead of you the person issuing the instruction is likely to be, but aside from that, you'd get the message fully through the words without having to be an expert in body language to unravel the meaning.

Mehrabian's theory and its implications are also not especially applicable in strongly autocratic environments, such as the armed forces. If the Regimental Sergeant Major tells a soldier to jump, the soldier is best advised to consider how high, rather than whether the RSM is instead maybe inviting a debate about the merit of the instruction, or the feelings of the soldier in response to it.

The value of Mehrabian's theory relates to communications where emotional content is significant, and the need to understand it properly is great.

This is often applicable in management and business, where motivation and attitude have a
Understanding the difference between words and meaning is a vital capability for effective communications and relationships. For example, as John Ruskin so elegantly put it:

"The essence of lying is in deception, not in words." (John Ruskin, 1819-1900, English art critic and social commentator)

The Mehrabian model is particularly useful in illustrating the importance of factors other than words alone when trying to convey meaning (as the speaker) or interpret meaning (as the listener), but care needs to be taken in considering the context of the communication: Style, expression, tone, facial expression and body language in Mehrabian's experiments did indeed account for 93% of the meaning inferred by the people in the study, but this is not a general rule that you can transfer to any given communications situation.

The understanding of how to convey (when speaking) and interpret (when listening) meaning will always be essential for effective communication, management and relationships. But using the Mehrabian percentages is not a reliable model to overlay onto all communications scenarios.

For example, Mehrabian's research involved spoken communications. Transferring the model indiscriminately to written or telephone communications is not reliable, except to say that without the opportunity for visual signs, there is likely to be even more potential for confused understanding and inferred meanings.

A fairer way of transferring Mehrabian's findings to modern written (memo, email etc) and telephone communications is simply to say that greater care needs to be taken in the use of language and expression, because the visual channel does not exist. It is not correct to assume that by removing a particular channel, then so the effectiveness of the communication reduces in line with the classically represented Mehrabian percentages. It ain't that simple.

It is fair to say that email and other written communications are limited to conveying words alone. The way that the words are said cannot be conveyed, and facial expression cannot be conveyed at all. Mehrabian provides us with a reference point as to why written communications, particularly quick, reduced emails and memos, so often result in confusion or cause offence, but his model should not be taken to mean that all written communications are inevitably weak or flawed.

If this were the case there would be no need for written contracts, deeds, legal documents, public notices, and all other manner of written communications, which, given their purpose, when well-written convey 100% of the intended meaning perfectly adequately using written words alone. When we enter a public bar and the sign on the wall says 'NO SMOKING' we know full well what it means. We may not know how the bar owner feels about having to bar his customers from smoking, but in terms of the purpose of the communication, and the meaning necessary to be conveyed, the written word alone is fine for this situation, regardless of Mehrabian's model.

A visitor to this page also made the fascinating observation that modern text-based communications allow inclusion of simple iconic facial expressions (smileys, and other emotional symbols), which further proves the significance of, and natural demand for, non-verbal signs within communications. The point also highlights the difficulty in attempting to apply the Mehrabian principle too generally, given that now electronic communications increasingly allow a mixture of communication methods - and many far more sophisticated than smileys - within a single message. (Thanks M Ellwood, Apr 2007)

Telephone communication can convey words and the way that the words are said, but no facial
expression. Mehrabian's model provides clues as to why telephone communications are less successful and reliable for sensitive or emotional issues, but the model cannot be extended to say, for instance, that without the visual channel the meaning can only be a maximum of 45% complete.

Nor does Mehrabian's model say that telephone communications are no good for, say, phoning home to ask for the address of the local poodle parlour. For this type of communication, and for this intended exchange of information and meaning, the telephone is perfectly adequate, and actually a whole lot more cost-effective and efficient than driving all the way home just to ask the question and receive the answer face to face.

The Mehrabian statistics certainly also suggest that typical video-conferencing communications are not so reliable as genuine face-to-face communications, because of the intermittent transfer of images, which is of course incapable of conveying accurate non-verbal signals, but again it is not sensible to transfer directly the percentage effectiveness shown and so often quoted from the model. Video conferencing offers a massive benefits for modern organisation development and cooperation. Be aware of its vulnerabilities, and use it wherever it's appropriate, because it's a great system.

Mehrabian's model is a seminal piece of work, and it's amazingly helpful in explaining the importance of careful and appropriate communications. Like any model, care must be exercised when transferring it to different situations. Use the basic findings and principles as a guide and an example - don't transfer the percentages, or make direct assumptions about degrees of effectiveness, to each and every communication situation.

I am grateful for the guidance of B Taylor and C Edwards in progressively revising this guide to Mehrabian's communications theory.

For more information about Dr Albert Mehrabian and his fascinating work see his website. Albert Mehrabian's key book is Silent Messages, which contains lots of information about non-verbal communications (body language).


Mehrabian's communications model is frequently applied in an overly simplistic or indiscriminate manner.

Please handle it with care and ensure it is used in proper context with suitable explanation.

see also

- [Body Language - non-verbal communications - theory and signals translator](#)
- [Transactional Analysis Introduction](#)
- [Transactional Analysis Explanation](#)
- [Tuckman's Forming, Storming, Norming, Performing model](#)
- [Emotional Intelligence (EQ)](#)
- [Empathy](#)
- [Don Miguel Ruiz's Four Agreements](#)
- [Cherie Carter-Scott's Rules Of Life](#)
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sales, marketing, strategy, business management

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- **human resources**
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- **teambuilding/games**
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funny and inspirational stories, quotes, humour

- **personal development**
personal development, self-discovery, self-help, life balance

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