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An Urban Legend Called: “The 7/38/55 Ratio Rule”

Городская легенда: “The 7/38/55 Ratio Rule”

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We have all experienced, consciously or subconsciously, that the spoken words are but one element of the conveyed message. Along with the words we notice the intonation of the voice, the rhythm and speed, the speaker’s expressions and body language. Many times, the non-verbal cues and signs carry a greater influence on the listener than the spoken word.

The impact of each channel (spoken word, tone of voice and body language) on the listener is what UCLA psychology professor Albert Mehrabian researched. In 1967 Mehrabian published his experiments results in two papers. [1] Mehrabian determine the weight listeners place on each of these elements: 7% on verbal, 38% on vocal and 55% on facial. Shortly after publication, Mehrabian conclusions caught the eyes of the public, in where it was popularly coined as the 7/38/55 ratio.

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Apparently, what caught the public eyes were the figures, the numbers, the percentage. Psychology does not consider to be an exact science, and not surprisingly so. After all psychology's forth father was philosophy. Psychology seems to research the empirical approach to questions raised by philosophy, and as such its' conclusions considered to be a bit ambiguous and vague. Yet, here comes a psychology paper that defines its' conclusions in exact figures. And numbers and percentage carry the image and façade of mathematics i.e. exact and accurate and in return reliable. So, no wonder that in no time consultants, experts and alike, in various fields which involve inter -personal communication started to quote Mehrabian's formula. This, in spite the fact that Mehrabian's formula was misrepresented by them!

Yet, as Mark Twain's famous phrase goes "a lie can get halfway around the world before the truth can get its boots on", Mehrabian's 7/38/55 formula became a rule. A rule that shortly was referred to as an axiom.

Eventually, investigators too adopted the formula for credibility assessment of criminal suspects' statements. Take as an example the often-quoted Christopher Voss who served for 24 years in the FBI as "... lead international kidnapping negotiator ... lead Crisis Negotiator for the New York City Division of the FBI... New York City Joint Terrorist Task Force for 14 years". [2] In his June 2016 blog titled "3 Insider Keys to "How to Spot A Liar", Voss shares with readers his expertise: "...the second thing I go into is the 7:38:55 ratio. The hypothesis here is that a message is carried at a relative weight of 7% content, 38% delivery, and 55% body language. Regardless of what you think of this specific ratio – body language is a great source of information about your counterpart's veracity".[3]

If we will follow Voss's 7/38/55 ratio advise we may face the following scenario: A suspect in a homicide case is being questioned by the police. The suspect is a normative law obedience citizen, who in a spore of a moment in a middle of a heated argument, lost his temper and killed his neighbor. Terrified of what he just did he fled the scene of crime. When first questioned by the police he denied any knowledge let alone involvement in the crime. Weeks later after an in-depth police investigation he was called in again for an interview. By now he is full of remorse, self-blaming and sorrow of what he did. After a prolonged interrogation he is willing to confess. The investigator asks him again for the hundredth time: "Have you killed Joe?" While getting ready to admit, the suspect experience an inner dilemma, in one hand he is ready to confess while on the other hand he fears the consequences that will follow: the trail, the publicity that will affect and shame him and his family, the punishment. And so, when he answers to the question by saying: "Yes, I did", his voice is hesitant and his inner conflict is being reflected in his body language: he moves on his seat uncomfortably, avoid the investigator eye contact, cover his face, etc. The trained investigator picks up all these signs and

cues. Being a great believer in the 7/38/55 rule he reaches the conclusion that he has just received a false confession. After all the spoken words (7%) contradicted the vocal tone (38%) and the suspect's body language (55%). Bottom line 93% of the conveyed message contradict the spoken word which point in the direction that the suspect is lying thus, his confession is false.

If the investigator's decision to overlook the confession seems irrational and illogical, note that actually the originator of the 7/38/55 ratio rule, prof. Mehrabian himself will object and disagree with the investigator's conclusion, or in his own words: "... My findings ... have received considerable attention in the literature and in the popular media... 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." [4]

But at this time, regardless of Mehrabian explanations the formula gained so much popularity that Mehrabian warning and clarifications passed unnoticed.

Mehrabian Studies

The studies focused on decoding the relative impact of facial expressions, vocal tone and spoken words. Both studies dealt with the manner individuals communicate emotions (negative or positive) as being expressed and displayed in a single emotional bearing word.

In the first study Mehrabian and Wiener [5] investigated which of these two factors: spoken word and the intonation and the tone of that spoken word has a greater impact on the listener when that spoken word is inconsistent with the tone of voice. 30 participants, divided to 3 groups (@10), were asked to listen to the recordings of two women who read nine different words (three positive "dear", "thanks", and "honey", three neutral "maybe", "oh", and "really" and three negative "brute", "don't", and "terrible"). The women spoke in three different tones (positive, neutral and negative). The participants were instructed to rate the degree of positive attitude of the women, subject to the following instructions: paying attention only the content, only the tone of voice and to all the available information. The experiment results were that the participants were better in detecting emotions in the tone than in the spoken word.

Mehrabian second study carried out with Ferris, [6] investigated which of these two factors: tone of voice and facial expression has a greater impact on the listener. The participants were listening to a recording of three women repeating the single word

“maybe” in three different expressing tones: like, neutral, and dislike. Later the participants were presented with female face photos expressing the same three emotions. The participants were asked to guess the emotions in the recorded voices, in the photos and both in combination. The experiment results were that the participants were better in detecting the emotions in the photo than in the recording.

A birth of a formula

Based on the results of the studies and in spite the fact that the two studies were different, the first compared spoken word to tone and the second tone to facial expression (spoken word was not part of the second study), Mehrabian integrated the results of the two into one, suggesting that the combined effect of each channel is the weighted sum of their independent effect with the coefficients of .07 (word), .38 (tone) and .55 (facial expression). It should be noted that in spite of deriving the figures from research, the formula ratio figures were arbitrary without being supported by a study i.e. they were not proven.

In addition to the unsupported formula, the studies received a lot of critiques such as: the situation was artificial, the participants were aware of the experiment scope, the experiments structure, the limited amount of talking and much more. But, Mehrabian's studies highlighted the focal points of inter-personal communicating feelings and attitudes as well as understanding that inconsistency between these channels when commuting feelings and attitudes should call for further inquiry by the listener.

Epilogue

The popularity that the formula gained in spite of Mehrabian's statement that the formula is being misused and misinterpreted, is a valuable lesson about people: If something serves them right, they won't be confused by the facts.

The 7/38/55 ratio rule that swamp the inter-personal communication field and gained much popularity, turned out to be a misquoted, misused and unsupported analysis method, shortly an urban legend and myth that should be forgotten and taken out of circulation. Game Over.

References

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