PARALINGUISTIC CUES AND THEIR EFFECT ON LEADER CREDIBILITY

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ABSTRACT

Paralinguistic cues are powerful non-verbal communication elements that have the ability to make even good news sound horrible or bad news more palatable. Drawing upon the hermeneutical phenomenology communication theory of Dilthey (1961) and Shannon’s (1949) communication channel model, this thesis targeted the six primary paralinguistic cues of fluidity, articulation, sonority, tempo, emotion, and dynamic intensity to discover how these cues interact and affect the credibility and palatability of a leader’s message. To facilitate remembrance of these cues, the acronym F.A.S.T.E.D. was coined and used. Three different groups consisting of managers, non-managers, and media and public relations professionals were surveyed to provide a triangulation of the data that helped identify these relationships. Research showed that these vocal cues were every bit as essential to an accurate understanding of the message as the actual words the leader employed to explain and compel both internal and external stakeholders. Further, the study indicates the importance of learning and applying these skills as well as a universality of their existence that transcends language barriers and cultural differences.
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Chapter 1. INTRODUCTION

The problem

If stakeholders do not believe the messenger, they will not believe the message. If the messenger does not believe in the message, stakeholders will never believe the messenger. Although this may seem to be a version of “which came first, the chicken or the egg?” it is not. It is more like the passing of the baton in a relay race. It all starts with an idea or truth that is so evident it cannot be ignored; a vision that is so compelling it is impossible to resist. Once a leader embraces it, their values and actions are transformed as they align themselves with it. This new conviction gives them the courage and confidence to use the skills they have long developed, and helps them reform and remove stumbling blocks that would detract from their message as they do everything within their power to persuade others of the truth that they have now become the ambassador of. They live and breathe the vision in their every interaction with stakeholders… they become the vision personified.

This is why Kouzes and Posner (2003) claim that leadership is very personal. It is not about the corporation, but about the leader and everything they are with regard to character and everything they do and do not do in the communication of their ideas. All of these elements, both lingual and paralingual, color the perception of their message and impact their credibility.

The importance

According to Kouzes and Posner (2003), credibility is the single most important attribute a leader at any level in an organization can possess. Without it, they have no voice with an organization’s internal or external stakeholders. Establishing credibility through what is done, what is said, and how it is said determines the level of trust and confidence among constituents; it is the currency a leader uses to gain the hearts, minds, and souls of those who
follow. The importance of credible communication cannot be understated with its regard to perceived organizational reputation and employee engagement. In 2012, Linjuan Men presented data from an online survey of 700 randomly selected employees from different position levels in a Fortune 500 company to question emotional appeal, products and services, financial performance, vision and leadership, work environment, and social responsibility of the CEO. It was revealed that the more credible the CEO’s message, the more competent, qualified, and more favorable reputation the organization enjoyed among all stakeholders.

This study seeks to define what paralinguistic cues may be used effectively by leaders in order to increase their level of credibility in communication and how to combine them for the greatest impact upon their constituents.

Definition of terms used

*Channel clarity* – the measure of how clear the communication channel is of noise or obstacles that might impede the flow of information.

*Channel credibility* – the measure of how reliable the communication channel is to delivery accurate and trustworthy information.

*Channel receptivity* – the measure of how open one is to the delivered message.

*Palatability* – the measure of one’s attitude of receptivity. The judgment one places upon the message being received as to whether they will react upon it or not.

*Paralinguistic cues* – non-verbal communicative signals. Specifically, the ones studied in this thesis are as follows:

*Fluidity* - the flow of the message. Does it seem that the speaker knows where they are going with their message? Do they use an excess of filler words such
as “uh”, “well”, “you know” etc. Does their speech stumble as they search for words?

*Articulation* - the clear pronunciation of words. Does the speaker slur words making it difficult to understand what is being said? Are they pronounced clearly and with purpose?

*Sonority* - the quality of the voice. Is the voice pleasant to listen to? Does it sound too nasal or unpleasant in such a way that people are put off by listening to it? Is it appealing?

*Tempo* - the speed at which the speaker speaks. Does the speaker talk too slowly so as to bore the audience or sound unintelligent? Does the speaker speak too rapidly for the listener to keep up and understand what is being said?

*Emotions* – the emotions apparent in the speaker’s delivery. Do the emotions displayed by the speaker’s voice match the content of the message? Are they appropriate for the message?

*Dynamic intensity* - the variation between quiet and loud, soft and forceful speech. Does the intensity of the speaker match the content of the message with regard to loudness and forcefulness?

**Organization of chapters**

This thesis consists of five chapters with chapter one outlining the problem and importance of the subject as well as pertinent terminology used throughout the text. Chapter two reviews and discusses the theories and models that provide the basis for the study and also looks at literature regarding the topic. Finally, it puts forth three research questions to be answered. Chapter three details the scope and methodology of the data collection and chapter
four presents and discusses the data in light of the research questions. Chapter five summarizes the six paralinguistic cues in light of the study, expresses limitations and further areas for study, and concludes with a summation tying the research back to the theoretical basis and need from which it arose.
Chapter 2. REVIEW OF THE LITERATURE

Philosophical/Ethical assumptions and Theoretical basis

Relationships form the foundation of civilization and cannot exist without communication in some form. Human beings are social creatures and seek the companionship, respect, and the love of others. To echo the words of the great English priest and poet John Donne, “no man is an island entire of itself” and people are constantly reaching out to connect with others in one way or another. In order for leaders to communicate richly, they need enter the world of their constituents and win their respect. How does one do that? By seeking them out where they are, trying to understand their culture, and identifying with them.

Almost 2400 years ago, Aristotle identified one of his rhetorical appeals as Pathos; identifying with the person to whom one is speaking. The English words *empathy* and *sympathy* stem from this ancient Greek word. The apostle Paul, also illustrates this concept well in the New Testament by saying, “I have become all things to all men so that by all possible means I might save some.” (I Corinthians 9: 22b, NIV). Theoretician Celeste Condit (2006) of the Institute for Behavioral Research at the University of Georgia supports this process of relationality as part of what makes us human. Condit says we must relate with people; the better we can relate, the easier they will hear what we have to say. If we are not interested in them, why should they be interested in us? Yet, when they see a genuine interest from us and we take the time to understand their world, the door opens for us to enter their world. They are then ready to listen to what we have to say.

Once commonality has been established, the speaker can then employ the hermeneutical approach to the phenomenological theory, as explained by William Dilthey (Rickman 1961). Dilthey explained how perception plays a vital role in interpretation of the message in light of filters such as circumstances, race, and cultural background. Considered
the father of modern hermeneutics, Dilthey claimed that understanding history provided the basis for understanding the world around us. Yet, one of the paradoxes of the hermeneutical approach is that history is always changing, depending upon one’s perspective.

The hermeneutical approach to communication concentrates on the interpretation of the message. It is an approach that attempts to embrace a variety of circumstances, philosophies, and definitions that provide room for other approaches to be presented as well. Traditionally, hermeneutics has its roots in Biblical interpretation as a tool with which a particular text could be more accurately understood from both a historical and cultural perspective. Thus, the hermeneutical method enables the text of history to come alive to the people of today (Deetz, 1977).

In order to fully comprehend a message as intended, it is crucial to understand the context within which it was expressed. Therefore, it is important to understand the traditions surrounding it and strip away presuppositions, assumptions, and scientific objectivity. One should see interpretive hermeneutics as a compliment to the objectivity of science.

Paralinguistic or non-verbal cues such as gestures, vocal nuances, and body language can help interpret the true meaning of the message and thus overcome these filters; thus aiding the listener in determining whether or not they believe what they are hearing and if they accept it as palatable.

However, even though a speaker can relate with people, speak their language, and present a crystal clear message that is logical and sound, if the speaker is not credible then all their efforts are in vain. The message recipient weighs everything that has been said thus far in light of the speaker’s credibility. Paraphrasing Yale University psychologist Carl Hovland, the recipient is asking, “What is this person’s experience or education?” and “What sort of person are they?”
Job applicants submit a résumé to attest to two credibility sources, namely their qualifications and character references. Those the speaker communicates with are looking in the rear-view mirror of their past knowledge of the speaker to compare against their own standards of what is right, fair, and normal. Aristotle called this credibility Ethos. Today, things are seen as ethical when they are perceived as upright and just.

But what about communicating with people the speaker has no close relationship with? Such is often the case with a leader in a large corporate as he or she addresses stakeholders. People tend to recall other instances or events where they have seen or heard the leader and relate the current message with that. They ask themselves, “Did I get that raise he/she promised everyone?” or “Did the political environment change as he/she predicted?” It becomes increasingly important for the leader to choose not only one’s words carefully, but also the paralinguistic or non-verbal cues that accompany them in the form of gestures, vocalics, stage presence, etc. In an era of increased media saturation, the general public is more apt to question sources than to take things at face value. Listeners are deluged with information in abundance and they are scrutinizing their information sources with increasing skepticism. For many, that river of information has become a torrent not easily judged, and they are looking for someone to trust (Gillmore, 2010).

In 1949, Claude Shannon, a research scientist at Bell Telephone Company, developed mathematical theory for signal transmission in order to solve high fidelity problems in sound transfer. His aim was to get the most amount of information possible through the media channel and in this way combat noise or disturbances that would diminish the quality of sound received. This developed into his well-known communication model that began with the transmission of a signal (message) through a channel and eventually being received. This model was further developed by David Berlo in 1960 as the SMCR Model of Communication (Appendix 1). Berlo’s model added the source to the equation and was thus represented as
Source - Message - Channel - Receiver. In communication settings, such as a speech delivered by a corporate leader, the speaker (source) delivers a message and the recipients listen. The delivery channel is found in the words he uses and how he colors them with nuances, inflections, gestures, and numerous other paralinguistic or nonverbal cues. Shannon was concerned with delivering the highest amount of information in order to increase the fidelity of sound. This thesis examines in what ways a speaker or leader may be able to increase the quality of the channel in order to obtain the clearest, fastest, and most reliable communication possible. It is theorized that paralinguistic cues play a major role in the transfer of information as they help clarify the message, lend credibility to the source, and enhance the receptivity by elevating the interest of the listener.

The Literature

Source credibility

Traditionally, source credibility has been used to gauge the impact of leaders upon stakeholders and is primarily based upon the leader’s expertise and trustworthiness. Carl Hovland (1951) has long been identified as one of the founding fathers of experimental research and its effects upon communication. At Yale University, he headed up the group of 30 researchers who sought to lay the groundwork of empirical propositions dealing with the relationships between communication stimuli, audience predisposition, and opinion change. Hovland and the Yale researchers identified two elements of credibility, namely expertise and trustworthiness or character. Expertise is the exhibition of specific knowledge or abilities in a given area, while trustworthiness is the proven track-record of the source. That is to say, does the source display a history of consistent credibility? Expertness was judged higher in importance and more effective with regard to opinion change. However, this differentiation
seemed to disappear after a few weeks as people tended to forget facts and remember and more of how they felt about the speaker.

These findings are further supported by Youngshin Hong (2008) in a paper questioning the perceived differences in communication effectiveness between an organization’s Investment Relations professional and their Public Relations professional as a corporate spokesperson with regard to financial questions. As mentioned, source credibility is partially based on expertise in which the possession of certain skills and one's competence to deliver when called upon is considered. Hong (2008) makes the point that the investment relations professional is especially qualified to answer questions regarding financial matters and therefore enjoys a high level of credibility. Since the public relations professional is not as versed in financial matters of the company as his investment relations counterpart, his credibility is not on the same level in this area. Nick Morgan (2002) echoes this disparity in his work in the area of crisis communication. He recommends corporates should leave the “heavy lifting” to the experts in times of crisis communication.

The second element of source credibility considered by Hovland’s team involved trustworthiness and dealt with elements of character, performance, and familiarity. In a study from 1993, John Budd, chairman and CEO of the Omega group, a New York-based public relations think tank, argues that CEOs can lose their credibility due to personality characteristics such as conceit, pride, and inattention to the importance of public perception based upon small details such as paralinguistic cues discussed later in this chapter. It would seem that stakeholders are looking for attributes they deem as virtuous and desirable. Attributes they themselves would like to possess. Indeed, it would seem they are looking for ways to identify (or establish pathos) with the corporate spokesperson. The elements of expertise and trustworthiness together work to strengthen the perceived reliability of not only the source, but the channel as well.
Packaging the message

In a study from 1982, W. Bendy Joseph revealed experimental evidence from advertising as to the persuasiveness and perceived credibility of attractive communicators. He presented an overview of opinion change suggesting that attractive communicators are more favorable in the eyes of stakeholders. An interesting aspect of the research revealed that attractiveness has no perceived effect on message recall, but is a significant determinate in opinion change. In addition, data supported the audience’s perception that attractive communicators were more fluent, spoke faster, had higher SAT scores and grade point averages, and enjoyed a higher self-confidence than those with whom they were communicating. Source perception measures revealed that attractiveness impacted source credibility in a significant way with audiences. Specifically, Joseph’s studies revealed that those listening to the message had more favorable valuations of an advertisement when attractive models were used. This research is important as it deals with the nonverbal communication of corporate spokespeople and how their attention to dress and appearance may have a direct effect upon stakeholder perception. Acceptance of the message is easier if the packaging (channel) is appealing. A question as to the sonority of a spokesperson’s voice, specifically the paralinguistic cue of sonic attractiveness, could have been easily tied to such a study. As indicted by other studies mentioned later in this thesis, sonority is very important.

Further, other data has confirmed that leaders and organizations associated with credible people and endeavors enhanced their own overall credibility. In 2002, a study by Goldsmith, Laffery, and Newell supported the impact of corporate credibility by celebrity endorsements. 152 adult consumers were surveyed as to their reactions to a fictitious ad and the acceptance of its credibility based upon the endorsement of a well-known personality. The results indicated the importance of endorsers with high source credibility derived from the familiarity of their celebrity status. This familiarity, in conjunction with a proven track
record of the corporate CEO or by the company he leads, further strengthens source credibility and confirms the character traits of the leader in a positive manner.

Paralinguistics

David Addington (1968) confirmed the existence of stereotypification by the listener based upon the sound of the presenter’s voice and that a link existed between it and the speaker’s perceived personality. He noted how the presence of certain vocal qualities influenced the listener and caused them to stereotypify the speaker. Addington measured the responses of 16 sections of students at the University of Iowa as they listened to 252 recordings exhibiting nine different vocal qualities at varying speeds and dynamic pitches. The recordings were made by trained readers; two men and two women. Notably, the perceptions recorded by the students were not always in agreement with the reality of the speaker’s personality and depending upon vocal quality, the speaker could change the respondent’s perception. Other studies by Addington (1971) indicate that the relationship between the sound of one’s voice and perceived credibility is “more than casual”. In his 1971 study, Addington focused specifically on four vocal variables: speaking rate, pitch variety, voice quality, and articulation. Of the four variables, articulation was found to strengthen credibility the greatest among listeners whereas speaking rate ranked last. He also noted that over-articulation tended to produce a less than normal speaking tone and therefore reduced credibility.

Articulation

David Addington (1971) also conducted a systematic experiment where he recorded ten trained voice actors reciting a uniform paragraph using 15 different characteristics to identify and detail certain paralinguistic variables that contribute toward the credibility of the presenter. Articulation rated first in credibility among the variables studied by Addington in
The precision reflected in an articulated vocal performance is often seen as deliberate and therefore a thoughtful representation of an inner conviction of the speaker. J. D. Moe (1972) also noted that articulation led to the perception of a more educated and thus credible speaker. Although the rate of speech is not seen to have a significant impact upon credibility, faster rates do increase the difficulty for good articulation and therefore play a role in affecting the credibility of other variables and the capacity of the channel.

Sonority (quality of voice)

The quality of the voice is an important factor with regard to credibility. Judee Burgoon (1978) specifically researched the attributes of a newscaster’s voice in predicting credibility. The findings were of particular interest in the radio and television industry where the credibility of the voice is of utmost importance in message conveyance. According to her study, there appeared to be at least two dimensions of judgments associated with credibility; namely an aesthetic or pleasantness dimension and an intensity dimension. Fluency, clarity, and pleasantness were perceived as interrelated and contribute to the general evaluative judgment of the audience. It is important to note that greater fluency enhanced all credibility judgments and greater pleasantness (sonority) created increased perceived competence and sociability. This could be likened to an unrestricted flow in the channel.

In a study that explored the role of voice quality in the communication of emotions, moods, and attitudes, Chasaide (2002) researched the effect of voice quality as well. A synthesizer was used to duplicate and measure the effects of seven different voice qualities such as harsh voice, tense voice, breathy voice, and wispy voice. Taken in combination with other factors such as gestures and body language, these can affect how a corporate spokesperson is perceived and in turn impact upon the credibility of the message.
Dynamics and intensity

With regard to dynamics and tone, two professors at the University of Québec (Gelinas & Chebat, 1992) presented their findings regarding the effects of prosodic variables such as voice intonation and voice intensity with regard to attributes involving low and high-level involvement issues. Their research tested the Elaboration Likelihood Model (ELM) by administering a questionnaire with 16 questions on a seven-point Likert scale to 279 students. Half were given a high-involvement issue to consider and the other half a low-involvement issue. Here, it was shown that the receiver’s attitudes are more likely impacted positively when he or she feels the message as relevant. Gelinas & Chebat’s hypothesis that vocal cues are powerful indicators of the speaker’s emotional state and credibility was substantiated in the data gathered. Further, voice characteristics were shown to be paralinguistic cues that are especially effective in low-involvement conditions and serve to maintain the attention of the receiver.

These findings are backed up by Addington’s 1968 study where his data indicated intonation as important in that the emotional variations in dynamics were more credible than that of the monotone delivery. His findings pointed out that the “normal” mode of delivery rated the highest in credibility. This would indicate that it is important to “be yourself” when communicating. Responders to his survey were more prone to believe a natural sounding delivery as opposed to a hyped-up version.

Empirical studies (Janoff-Bulman & Hanson Frieze, 1983; Kidd & Chayett, 1984) distinguished two basic styles of self-presentation: one that is a highly emotional style in which a rape victim displays distress that is clearly visible to outsiders. The other style is more low-key, with feelings checked and controlled. In the former case, for instance, the experiences expressed with a trembling voice is more interrupted by fits of crying; while in the latter case, the victim makes a more numb and resigned impression on the observer.
These two styles may have a differential impact on the perceived credibility of the victim experienced by the police officers in charge of interrogation. Thus, it is quite clear that equating emotionality with truthfulness is a perceptual distortion (Wortman, 1983).

Powerless speech is characterized by numerous language features, including intensifiers (very, much, a lot), hesitations (eh, em, um), hedges (sort of, kind of), where the person hesitates to give an answer, often repeats questions that are asked, and does not speak fluently. On the other hand, powerful speech is very straightforward, sure, and not at all hesitant. A person who speaks in a powerful way is more likely to be believed. They are perceived to actually believe what they are saying, due to the courage they must gather to “speak up.” Powerful speakers are viewed as more attractive. Hosman (1989) also examined the influences that speech has on depression formulation and the credibility of a person. Findings suggest that a person using powerless speech is less likely to be believed while one who uses powerful speech receives a higher status by listeners. Moreover, because of the disorganization inherent in a powerless style, listeners find it more difficult to concentrate and understand the true meaning. For them, it is a psychologically costly endeavor and this causes them to rate a powerless speaker somewhat lower (Lind, Erickson & Conley, 1978). In fact, this actually adds to the "noise" of the channel, making reception more difficult. Writing for the Harvard Business Review, Georgetown University linguistic professor Deborah Tannen (September, 1995) would agree, citing that “judgments regarding confidence can be inferred only from the way people present themselves, and much of that presentation is in the form of talk” (p 138).

Modeling the message

In his book Understanding media: The extensions of Man, Marshall McLuhan (1964) coined the phrase “the medium is the message.” According to McLuhan, the medium of the
message was every bit as important as the content it carries. Based upon the research of paralinguistic cues thus far, it would seem that incongruence between medium and message would detract from the credibility of the message. It is important that the spoken word be supported by paralinguistic cues that match its content. That is, the channel must match the message in order to optimize receptivity, clarity, and credibility. For example, it would seem very inappropriate to present someone with an expensive Rolex watch in a simple, brown paper bag. Research by Dr. Carol Goman (2008) confirms that good body language should support the spoken word and that business professionals often overlook this fact as well as the importance of a good vocal tone, the paralinguistic cue of sonority, in presentations. Her research asserts that people are more likely to be convinced not by the content of the spoken word, but by the kinds of signals they receive from paralinguistic cues. These cues can take the form of gestures, staging, proper dress, and even competence. It is interesting to note that a controlled presentation (where the speaker is relaxed, unafraid, and able to present information with fluency) is seen as a confirmation of competence that in turn justifies an increase in credibility.

Public speaking and media coach Gary Genard (2004) agrees with the importance of modeling and writes of the role played by power and persuasion in speaking presentations. He outlines three key areas of nonverbal communication as vocal, visual thinking, and gestures and facial expressions that he considers vital in strengthening the credibility of a speaker. These outward actions reflect the inner thoughts of the messenger and have a direct effect upon his perceived source credibility. Therefore, the extent to which the actions are congruent with the message is directly linked to listener receptivity and trust. Interestingly, the greater use of facial expressions increased the level of credibility up to a point. However, it would seem there is a “tipping point” at which both exaggerated gestures and facial expressions can border on the ridiculous. Once there, credibility has been lost and the channel
is no longer a positive method of impact upon the receiver. This is supported by similar findings regarding the use of dynamic variations in speech to be addressed later on in this study. Studies by David Crystal (1975) not only support Genand’s writings, but also point out that many professions seem to produce a certain paralinguistic style or tone. That is, when acting within the role of their profession, people take on a certain tone or paralanguage that becomes a standardized "channel" recipients are familiar with, thus enhancing receptivity by providing a commonality for them to relate to. As this thesis has shown, the relationship between the message and the media is not something to be disregarded. Non-verbal researcher Ray Birdwhistell pointed out in 1955 that disregarding the dynamics that exist between verbal and nonverbal communication is to attempt two separate parts of a whole. To him, the relation of the two was so interwoven that they could not be separated. What is being said must match with the gestures, dynamics, vocalics, and other so-called body language cues that are being communicated.

Listening to feedback

The ability to listen is closely akin to the pathos of classic rhetoric. Without empathy and a desire to understand, communication attempts become more of a monologue and fail to have the impact the dialogue of true communication can achieve. Although not specifically listed as a paralinguistic element, the importance of listening cannot be understated when establishing a platform on which to build a relationship where communication can flourish. Convergence, as outlined by Em Griffin (2009), is the practice of adapting one's speech to the conversational partner (p. 389). If a partner speaks in short phrases, convergence would adjust cadence and delivery to identify more closely with the other in order to facilitate a higher level of communication. This adjustment involves listening to the other party and understanding how they communicate. This same method can be applied to the leader of a
company in their search to understand the language of the stakeholders. Active listening is vital to the success of the leader in a desire to truly understand constituents and communicate messages that will be taken to heart by those one seeks to win. The SCMR model mentioned earlier in this chapter explains that feedback from the recipient is of vital importance in fine-tuning the channel delivering the message.

Diane Durkin (2011, Kindle Location 80) explains the importance of building a corporate culture where top management is dedicated to understanding and meeting the needs of employees, customers, shareholders, and other company stakeholders. As a top-level leadership consultant, she explains that her research has led her to the conclusion that employees who feel they are seen, heard, and listened to by management develop a high level of loyalty to the company. It is the communication that is modeled from the very top leader that sets the corporate culture and promotes an internal loyalty to the vision, culture, and people of the organization. This employee loyalty is then seen by customers, who in turn develop their own loyalty to the brand, the company, the organizational ideals, and even the CEO.

Other considerations

With regard to channel noise and other contributors to poor reception, it is important to point out a few other elements that can detract or add to an optimal message channel.

Vocabulary, grammar, and organization

How a spokesperson chooses to present content is also indicative as to the level of credibility they may or may not enjoy. Not only is it important they choose subject matter that is relevant to the audience, their ability to organize it and deliver it in a manner that will have maximum impact and retention plays an important role as well. In 1972, J.D. Moe presented evidence dealing with listener judgments of status cues in speech. In this study,
Moe dealt with the question regarding a person's use of vocabulary and grammar and its effect on the listener's perception as to the social status and credibility of the speaker. Thirty speakers were recorded performing three vocal exercises: alphabet recitation, a free response exercise, and the reading of a standardized paragraph. As expected, the research revealed a direct correlation between the level of perceived social status and the actual level of education held by the speaker. Although one cannot assume that education is equal with credibility, one might assume that an educated person has the ability to extrapolate information better and come to a more grounded conclusion. This data would suggest that respected and credible leaders model a vocabulary that matches their position and message. Profanity would be unbecoming such a leader and detrimental to the channel in that it exhibits not only lack of control, but also a deficiency in vocabulary.

Transparency

In 2012, Karin Basaraba, a senior communications specialist at the Insurance Corporation of British Columbia, employed several social media tools to increase the level of corporate credibility among consumers by broadcasting corporate policies and information to stakeholders in a more personal tone. Consumers were positive to this and communication credibility increased from 40% to 70% in transparency and accessibility as a result of these simple actions. Several communicative lessons learned from this exercise are directly applicable to leader credibility. When the leader is confident, natural, unashamed, realistic, helpful, honest, and transparent, stakeholder trust and admiration is extremely high. Since employee engagement is also strengthened as the leader models character attributes they desire for their own lives, the overall corporate culture begins to mirror the tone set by the leader (Kouzes & Posner, 2003, Kindle Location 301).
Rationale

In study after study over the past 40 years, it is apparent that certain key elements must exist for leaders to have a credible impact upon their constituents and stakeholders in general. The paralinguistic elements of articulation, sonority, dynamics, and fluency serve to optimize the performance of the delivery channel of the message. Yet, this does not guarantee message acceptance. Empirical evidence from Carl Hovland and his work with source credibility is supported by the reality of not only stakeholder relationships, but by the very character of people one meets in their everyday lives. Today’s leaders must not only walk the talk, but they must be able to cast and clarify a vision whose time has come. In addition, they must be able to communicate that vision in a medium that matches the message. Further, they must execute this communication in an attractive way so that the threshold of resistance is lowered for those listening to the message. Research shows that the nonverbal communication of paralinguistic cues facilitates this through the honest and transparent use of elements such as dynamics, sonority, articulation, and fluency.

With such an arsenal of persuasive tools available, it would seem to be the ethical duty of the leader to keep close watch on their motives if they are to maintain long-term credibility. Viewing constituents as merely a means to an end is the equivalent of objectification as described by the German Jewish philosopher Martin Buber (1958). However, should the leader wish to build a solid relationship with constituents, this could be the bedrock of long-term credibility as stakeholders familiarize themselves with the character that lies behind the words of the leader. Further, the leader willing to use their position in order to promote the good of the organization above personal gain develops the courage Cornell West (1989) would deem as "prophetic pragmatism" by exemplifying the words of scripture in Ephesians chapter 4 "speaking the truth in love" and further cementing the trust
of those around them. This is an attitude that would seek the good of both the leader and the follower by establishing mutual alliances on the basis of shared values.

Shannon put forth his mathematical theory for signal transmission in order to solve high fidelity problems in sound transfer and Benlo expanded it into the Source-Channel-Message-Receiver model. It seems logical for this thesis to explain how the communication channel in this model is impacted by various paralinguistic cues. Inasmuch as the ability to internalize the message is affected by the impact upon the message by the channel, this thesis will look at various ways in which the speaker can optimize the channel for improved delivery of the message. As with Sharon's original model, the message can be regarded as a telephone call with the channel being the cable or telephone wire. It is important to find ways to improve delivery by providing the a) clearest, b) most pertinent, and c) most reliable cable available. Paralinguistics can be used to a) clarify and take away noise b) establish relevance, and c) improve reliability by establishing a higher level of credibility as the relationship between sender and receiver grows stronger thanks to source credibility. Hermeneutical phenomenology plays an important role in this as the sender adjusts the channel along with the message according to the feedback from the receiver.

Research questions

Based upon the literature reviewed, it is therefore worthy to answer these questions:

1) What paralinguistic cues increase channel optimization today?

2) Can these specific paralinguistic cues be learned and thereby improve the leader's credibility?

3) What forms of modeling are most efficient in establishing credibility?

The next chapter will address the scope and methodology of study that will be used in answering these questions.
Chapter 3. THE SCOPE AND METHODOLOGY OF THE STUDY

Scope

Helping people see the organizational vision by living and breathing it is one of the jobs a leader should have foremost in his mind, according to Jack Welch (2005) in his book *Winning* (p. 61). Good leadership depends on good communication, there's just no getting around it. Modeling of the corporate vision helps communicate values to the organization and one of the most apparent examples of this is evident when a leader stands up and speaks to stakeholders. In the previous chapter, the importance of matching the delivery channel to the message was explained as being crucial to the credibility of both the message and the sender or speaker. Therefore, the scope of this study was to investigate the relationship between paralinguistic cues given by leaders and their perceived credibility among internal and external stakeholders. The study included three primary objectives that were to be answered by the research.

The research sought to study the opinions of the three stakeholder groups most closely affected by the use of paralinguistic cues in organizational communication, these were: leaders (managers), constituents (direct reports), and media and public relations professionals. Leaders were chosen because they are not only the initiators of a message, but also have a unique peer perspective of other leaders. This group may have a better insight into the intent of the message that could possibly color their reception of the message. Constituents, or non-managerial employees, were chosen due to the fact that they are often the ones to whom managers are communicating and it is important that they understand the message being sent so that they can act upon it. Finally, media and public relations professionals were chosen to represent external stakeholders. This group was important as they affect the opinions of external interested parties such as competitors, customers, and
government agencies. Often, even the most internal messages find their way to the outside world and it is important that they be understood in the correct light of their initial meaning.

Therefore, this study concentrated on how paralinguistic cues affect the channel of delivery with regard to clarity, reliability, and receptivity. The specific paralinguistic cues studied were selected as a result of previous literature reviewed. In various studies already mentioned in chapter 2, these were the cues that have shown themselves to be most important in establishing clarity, reliability, and capacity of information. These cues are easily remembered by the acronym F.A.S.T.E.D. represented by: fluidity, articulation, sonority, tempo, emotions, and dynamic intensity.

Paralinguistic, or nonverbal, cues are not limited to the six mentioned above. In fact, there are a great many other so-called vocalic cues that deal with vocal sound. However, in light of the literature reviewed, these other cues were not deemed as essential to establishing the speaker’s credibility as the ones this study concerned itself with. Nonverbal cues such as gestures and body language were not studied either, because the study was limited to vocal presentation with regard to today’s increased popularity of videoconferencing and teleworking in organizations and the inherently important role of the voice in these mediums.

Just as the integration of multiple empirical senses heightens the experience of an event, so should the presence of multiple paralinguistic cues, working in harmony, improve the communication impact and internalization by the recipient.

Methodology

In that the focus of this study deals primarily with gauging the perceptions and attitudes of the message recipient concerning the message channel, it seemed only natural to survey these reactions in a way that would provide the data needed. Survey-based behavior – oriented research (Rubin, Rubin, Piele, & Haridakis, 2010) is widely used as an efficient means of gathering research data and is especially applicable when administered online when
time and money are important constraints. With regard to the topic of this thesis, a similar online survey was used in 2012 by Linjuan Rita Men to explore leadership influences upon CEO credibility. Men presented data from an online survey of 700 randomly selected employees from different position levels in a Fortune 500 company to question emotional appeal, products and services, financial performance, vision and leadership, work environment, and social responsibility of the CEO. It was revealed that CEOs who are seen as more competent, qualified, and possessing more expertise tend to promote a more favorable organizational reputation among all stakeholders and improve employee engagement as well.

Men’s study explained how CEO credibility positively affected employee engagement in accordance with their perception. As the employees trusted the CEO more and more, their perception of the organization improved and so did their engagement. In light of Men’s study, it seems reasonable to research how a leader's credibility could be improved during interaction or communication with employees.

To gather the data necessary and analyze the opinions of the three stakeholder groups, a survey tool (appendix 2) was developed consisting of four videos and 26 questions for each video. The tool asked respondents to first view a one-minute video of a leader speaking to a group of people. This was done via a YouTube link. In each of the four videos, at least one of the paralinguistic cues to be studied was evident. Respondents were then asked to answer 26 questions regarding the effect of the six paralinguistic cues (F.A.S.T.E.D.) with regards to improving the clarity, credibility, and receptivity of the speaker.

Video one featured a corporate CEO introducing his company to potential customers via a corporate film. He was shown speaking to them in an informal way, presumably to establish familiarity with them. This clip was chosen as a representative of poor dynamic intensity and emotion. Although his flow, sonority, and tempo were average; his articulation was a bit lacking as he slurred some words.
Video two featured an English lord in Parliament speaking about an item he felt important to the economic welfare of the nation. This clip was chosen to provide a baseline for poor performance in all categories. He stammered, was non-articulate, spoke with a weak voice, had poor tempo, expressed little emotion, and was monotone in his delivery.

Video three featured an expert presenter speaking on leadership attributes. His engaging and entertaining delivery was expected to score high marks in all categories. His performance was used as a benchmark for high credibility.

Video four featured an expert reporting on economic trends in the United States over a 30-year period. Her presentation was logical as she explained her findings in a manner that revealed her true passion for the subject. Although her flow was a bit unsteady at times, her articulation, sonority, and tempo were average. This clip was chosen in that it revealed how passion, as expressed by the use of emotions and dynamic intensity, could possibly heighten credibility.

The 26 questions accompanying each video were designed to query the listener’s perception of the speaker’s ability to use the six paralinguistic cues with regard to improving the communication channel attributes of clarity, credibility, and receptivity. Respondents were asked to rank the speakers’ performance using a 7-point Likert scale. With regards to fluidity, articulation, and sonority a ranking of 7 was considered to be the optimal value given. In light of Addington’s findings in 1968, the importance of finding a proper balance in tempo, emotions, and dynamic intensity was considered and so the optimal value on the Likert scale here was 4.

In order to gain the sample needed for the survey tool, a multi-national tool and equipment manufacturer was contacted. Working directly with one of their corporate communications professionals and the Human Resources department, the survey tool was
sent electronically to 202 employees having both management and non-management roles and representing 12 different countries. In addition, the same survey was sent to 150 external media and public relations professionals.

**Research validity**

Rubin, Rubin, Piele, & Haridakis (2010) suggest that a good way to gather data for use in a study such as this one is to employ a survey tool. Since the aim of this study is to research channel optimization and to increase validity, questions contained in the survey instrument were designed to specifically look at how six paralinguistic cues affect the clarity, credibility, and receptivity of the channel. The data gained from the respondents was in direct response to the first research question as to the role paralinguistic cues play in optimizing the channel. In addition, there were specific questions as to the ability to learn these cues and to what level. Further, the tool was designed to allow the researcher to judge which paralinguistic cues were more easily modeled than others. Thus, the tool allowed the researcher insight into research question number three that deals with more efficient forms of modeling credibility. In that the research was specific to a particular organization, the results were especially valid to its internal communication improvement.

The specificity of the research questions, use of independent target groups, and the combination with the limited parameters of clarity, credibility, and receptivity of the channel as affected by specific paralinguistic cues; insured the internal validity of the study and the consistency of its conclusions. Since the study dealt with nonverbal communication, it was not limited to applications existing only within one particular multinational organization. Rather, the study is applicable to a broad audience and to communication in general as people everywhere seek to become better communicators.
Research reliability

In order to increase data reliability, three different stakeholder groups were chosen to provide a triangulation of results. The consistency reflected by the various groups established a high degree of reliability as did the number of respondents. The survey tool was designed to be simple to use and easily repeatable. Further, an additional control group outside the defined stakeholder groups was used and results consistent to the primary stakeholder groups were obtained.

Ethical Considerations

In order to protect the anonymity of the respondents, the online survey did not request names or any other identifying information. Respondents were encouraged to be as objective as possible. Further objectivity was assured by the anonymity of the video clips viewed; respondents had no prior knowledge, relationship, or opinions of the presenters.

The next chapter will review, analyze, and discuss the results of the survey in light of the research questions presented earlier.
Chapter 4. THE STUDY

Introduction

An international heavy equipment and tool manufacturer provided the population for both internal stakeholder target groups and the survey tool (appendix 3) was sent electronically to 202 employees with 72 people responding. This internal stakeholder group consisted of both managerial and non-managerial employees representing some 12 different countries around the world and provided an unexpected (yet welcomed) parameter of individuals whose native tongue was not English. Since the survey was carried out in English, this added parameter provided new insights on the paralinguistic cues being studied. Specifically, it was interesting to see how the language proficiency of a respondent affected their perception of the cues. Surprisingly, the difference was negligible and would lead one to believe that paralinguistic cues might be universal.

The respondents of the external stakeholder’s target group consisted of media and public relations professionals belonging to a Swedish national professional organization. One hundred and fifty surveys were sent to media professionals, professional media organizations, and specific media agencies resulting in 46 responses. This group was also a mix of both English and a secondary language, namely Swedish. It should be noted, however, that Swedes command a very high level of English and study it beginning in the 3rd grade and on through high school. Therefore, it may be assumed that the language issue is not of great importance in this group.

The largest groups represented in the study were international managers and media professionals whose primary language was not English. Since the corporate language for the company represented in this study is English, the video examples presented were also in English. Therefore, the perceptions discussed in the study are extremely important as they
affect the communication process within the company as well as stakeholders outside the company in influencing public opinion.

Despite the difference in language, it was interesting to see how uniform the answers were between various subgroups. For the most part, the standard deviation of responses among both English and non-English, managerial and non-managerial, and media professionals was no more than .7 on a seven-point Likert scale. Between the two largest groups, international managers and international media professionals, the standard deviation was less than .35 on average. Therefore, it is felt that the survey reflects an accurate and reliable picture of how stakeholders perceive the channel attributes of clarity, credibility, and receptivity as affected by the six paralinguistic cues of fluidity, articulation, sonority, tempo, emotion, and dynamic intensity. The two largest groups representing international managers and international media professionals were used to obtain a mean response in all questions. This number was obtained by multiplying the number of international manager responses (49) by their average response rate and then adding the number of international media professionals (29) multiplied by their average response ranking. Then the sum of the two groups was divided by 78 to obtain the representative number reflecting an average of the two groups.

This study looked at the four different presentations and the responses they generated, however it will not be comparing the presentations to each other, but rather looking at how the use of paralinguistic cues affected optimal scores with regards to clarity, credibility, and receptivity in each case. For fluidity, articulation, and sonority a ranking of 7 was considered to be the optimal value given on a 7-point Likert scale. However, in light of Addington’s findings in 1968, the importance of finding a proper balance in tempo, emotions, and dynamic intensity was considered and so the optimal value on the Likert scale here was 4. Then, the study will look for parallels between the presentations and seek to discover answers
to the study’s three research questions. The study will now discuss each of the presentations separately and examine the responses from the various stakeholders.

Data analysis

Presentation 1

In presentation 1, respondents viewed a video clip of a corporate CEO presenting his company. According to respondents, he scored an overall credibility of 4.76/7 yet his passion ranked lowest of all presentations with only 2.8/4 of what would be considered appropriate (appendix 3). A normal score of 4 on a 7-point Likert scaled represented him as not overly or insufficiently passionate, as extremes in both directions can affect credibility according to Addington (1968).

With regard to fluidity - the flow or smoothness of delivery as opposed to pauses caused by searching for words or thoughts – in the area of message clarity he scored 5.13/7. Respondents were prompted, “The speaker's fluidity helped make his message clear.” The percentage obtained here is based upon an average between the two largest response groups, namely the international (non-English language) managers and the international media professionals. The English language sub-groups responded about 10% higher, possibly due to the fact that they were more comfortable with the language.

To measure the respondents’ opinion of the CEO’s credibility in his delivery they were asked to agree or disagree with the statement, "The speakers fluidity helped his credibility." Here, the speaker scored an average of 4.9/7 of the optimum value among the different groups and when asked to agree or disagree with the statement, "The speaker's fluidity increased the amount of information he conveyed" scored 4.9/7 and therefore indicated that the speaker exhibited above average fluidity that helped improve the communication channel.
Respondents were then asked to agree or disagree with the statement, "The speaker spoke clearly without slurring words." This statement was aimed at evoking a response regarding the speaker's use of articulation - the proper and clear enunciation of words. Here, the speaker scored a 5.04/7 average among all groups, which is slightly above an average score of 4.0/7 with regard to clarity.

When asked if the speaker's voice quality or sonority helped them more easily understand, respondents answered that he was above average with a 5.13/7 score. However, with regards to credibility, respondents only agreed to a level of 4.34/7 with the statement, "The speaker's voice quality made you interested in what he was saying." Further, they only ranked him slightly above average with regards to receptivity by giving him a 4.2/7 score.

Tempo is the rate of speed with which the speaker speaks. Responding to the statement, "The speaker’s tempo made it difficult to understand the message," scores reflected that the speaker spoke slightly too fast with regards to clarity and credibility. Here, based on the rating of 4.0 as the normal or optimal tempo, he was about .7 of a point faster than what people considered comfortable to clearly understand the message. However, they did feel his tempo was near perfect with regards to speaking in a credible manner and reported that his speed was only slightly above an optimal value. Receptivity was down .35 of what is considered normal in the opinion of our respondents. Possibly, people would just like him to get to the point faster.

With regard to emotion, presenter number one scored the lowest of all four presentations. In this application, respondents were told that the speaker's emotions should match what is being sent and help them "read between the lines." In the areas of clarity and credibility, his emotion was 2.52/4 and 2.64/4 respectively. As far as receptivity and how emotion affected it, he scored slightly higher with a 2.84/4. In general, respondents felt that
he was 29% to 37% less emotional than they would have liked. This figure is interesting in
that it is close to the 4.76/7 overall credibility rating he received.

The dynamic intensity of the speaker was equally below par as he scored a 2.44/4 in
matching his dynamic intensity to better clarify his message. Respondents were told that the
use of dynamics in the voice were represented by fluctuations in intensity as opposed to a
monotonous presentation. When asked if the speaker made good use of dynamic intensity to
make his message clear, the score was 2.44/4. With regard to credibility and receptivity, each
of these attributes scored a 2.82/4.

Presentation 2

In this presentation, an English lord in the House of Parliament made a presentation
regarding a financial institution. Respondents watched a one-minute video clip and gave their
opinions regarding each of the paralinguistic cues in the study. In the area of fluidity, he
received a score of 3.08/7 in clarity, 3.15/7 in credibility, and 2.94/7 in receptivity. These
were the lowest scores given to any of the four presentations in fluidity. It should also be
noted that at 3.71/7, his overall credibility was also the lowest. With regard to articulation, he
also received the lowest scores with a 3.01/7 in clarity, 3.22/7 in credibility, and 3.08/7 in
receptivity. The sonority of his voice was ranked at 2.94/7 for clarity, 3.29/7 in credibility,
and 3.15/7 in receptivity. Admittedly, his voice was a bit nasal and raspy.

The tempo of this presenter was a bit higher than what respondents deemed
appropriate. As far as clarity, he was .56/4 above what respondents considered normal speed
in order to be properly understood. With regards to credibility and receptivity, both were only
.14/4 above the optimal score. It was interesting to listen to his presentation and it would
seem the tempo added to this facet while not directly contributing to the channel
characteristics even though receptivity was not affected. The speaker’s emotions also seemed
to match the presentation quite well and earned him a score of .07/4 above what is considered appropriate in the area of message clarity and a near-perfect score as far as emotional credibility. However, it would seem that his use of emotions did not help the receptivity of his message as much as it should and he received a score that was .15/4 below what would be considered by the respondents as an appropriate level.

The speaker’s dynamic intensity in presentation two was just a bit below optimum with scores of 3.72/4 in clarity, 3.68/4 in credibility, and 3.52/4 in receptivity. Here it would seem that respondents were looking for more dynamic intensity to support the importance of the message.

Presentation 3

The speaker in presentation three scored the highest marks in all areas as he spoke to a room filled with salespeople. He was not bound to a podium or lectern, and made full use of the stage as he walked back and forth delivering a polished presentation. All respondent groups scored his fluidity high in the area of clarity with 5.17/7. Credibility and receptivity were also high with 5.17/7 and 5.53/7 respectively. His articulation was excellent and scored 5.51/7 in clarity, 5.60/7 in credibility, and 5.53/7 in receptivity as he made use of various dialects to exaggerate certain words.

It was also easy to hear the speaker had a trained voice and was used to speaking in public. The sonority of his voice apparently pleased respondents and they gave him a 5.39/7 in clarity, 5.46/7 in credibility, and a 5.25/7 in receptivity. It was an overall pleasant experience to listen to him. With regard to tempo, the speaker kept a brisk pace with half a point above normal in all three categories. It would seem that because of his articulation and sonority, even speaking at this slightly increased speed had no effect on clarity, credibility, and receptivity.
In this study, Swedes made up the majority of the international manager group and the media professionals group. Swedes do not often show their emotions in public, unless it’s at a football game, so it is not surprising to see that presenter number three was judged slightly too emotional according to this survey. In fact, even English-speaking respondents were somewhat in agreement as his aggregate emotional score in clarity was 4.68/4 above normal, .72/4 above normal in credibility, and .72/4 above normal in receptivity. The study group would like to see the speaker ease off a bit. The same is true in his dynamic intensity as he scored between .60/4 and .84/4 above what is considered appropriate for the message he is delivering with regards to the three categories. His overall passion was judged at 6.16/4 or 2.16/4 above average and could be considered too intense for some audiences. However, in spite all of this, his overall credibility was scored at 5.67/7 and is the highest of all the presentations.

Presentation 4

A social trend was the topic of presenter number four's message to her audience. According to respondents, the fluidity of this presenter was slightly above average with a score of 3.85/7 in clarity and 3.92/7 in both credibility and receptivity. It should be noted here that there was a deviation of 1.5 points between international managers and non-managerial employees on this point and represented the greatest deviation between two groups in the study. This could possibly be due to a greater degree of affiliation with the subject matter among employees who are paid less than managers as outlined by the Elaboration Likelihood Model of Gelinas and Chebat (1992).

With regard to articulation she received a 4.41/7 score in clarity, a 4.32/7 score in channel credibility, and a 4.27/7 score in receptivity. Likewise the sonority of her voice was also scored low at 4.41/7, 4.20/7, and 4.27/7 in the three categories. However, the speaker’s
tempo scored almost perfect in all three of the categories. Respondents thought her clear, credible, and efficient at delivering information. In addition, her emotions seemed to match the content of her message better than the first three paralinguistic cues mentioned. Here, she received marks of 3.28/4 for clarity, 3.36/4 for her credibility, and 3.48/4 for receptivity. Even her use of dynamic intensity received excellent scores of 3.36/4 in clarity, 3.44/4 in credibility, and 3.32/4 in receptivity. It is no surprise that she received a good score regarding overall passion with only .07/4 above what is deemed appropriate for her message by the respondents. Yet in spite of these good scores in emotions and dynamic intensity, her overall credibility was only 4.55/7. This was a score close to her average articulation result of 4.33/7.

In light of the data gathered and the analysis made, it is now appropriate to discuss the findings and the research questions that guided this study.

Results and discussion

According to the data represented in this study, fluidity and articulation seem to have the greatest effect on channel credibility. In each presentation, both articulation scores and fluidity scores were very close to the overall credibility perception with fluidity being the closer of the two. It is not difficult to understand that the more familiar a speaker is with the material being presented, the more at ease they are and this is reflected in their fluidity. The speaker does not have to search for words and speak impromptu or “off the cuff”. When one has to search for words or reasoning to support a message, it would seem credibility goes down. Properly articulated words indicate that the speaker is familiar with them and has taken the time to choose them for the message. As stated in Chapter 2, J.D. Moe (1972) indicated that people with larger vocabularies and a greater command of language were perceived to be more educated and thus possess a higher degree of source credibility, therefore it seems odd
that an educated CEO such presenter 1 scored only a 4.41/7 and 4.48/7 in the areas of credibility and receptivity, respectively.

Sonority played an interesting role in channel optimization in that it could be paired with different cues to produce different effects. For example, when present along with articulation and fluidity, it increased credibility even further. Figure 1 shows how the presence of sonority affects the credibility factor generated by fluidity and articulation. A good sonority score will raise the aggregate credibility score.

Figure 1

![Graph showing the effects of sonority on credibility](image)

When tied to emotions and dynamic intensity, sonority improved clarity. Presenter 3 scored the highest of all examples in sonority (5.37/7) and his credibility scores in fluidity and articulation were very close at 5.29/7 and 5.55/7 respectively. His emotion and dynamic intensity scores were also very near the clarity optimum as well. However, when the voice was not sonorous, it was seen to have the opposite effect as evident in presenter 2 who
produced the lowest scores in sonority at 1.2/7 with corresponding low credibility scores in fluidity and articulation of 1.2/7 and 1.0/7 respectively.

Although variations in tempo understandably affect the amount of information (throughput) the channel can carry, this paralinguistic cue seemed to be closely tied to gaining and maintaining the attention of the listener, especially when used in conjunction with emotions and dynamic intensity. Monotone presentations that drone on at a snail’s pace tend to put people to sleep and do not necessarily affect the credibility, clarity, or receptivity of the speaker. However, speakers who speak too fast can have a tendency to slur words, thus affecting the articulation and clarity of the message channel (Addington, 1972).

Emotions and dynamic intensity were also cues that, if not used properly, could have adverse effects on message credibility, clarity, and receptivity. Too much emotional or dynamic variation is not deemed appropriate. It was surprising to see that these two cues were not more closely linked to overall credibility. In 3 out of the 4 presenters, credibility was disproportional to the emotion and dynamic intensity scores and more closely matched the scores of fluidity, articulation, and sonority as shown above by Figure 1.
Scoring an appropriate level of these two did not guarantee a higher score in credibility, as evidenced by presenter number four. However, emotion and dynamic intensity were directly linked to the amount of passion for the subject matter perceived by the respondents. Figure 2 reveals that in three of the presentations, passion was at least 0.7/4 higher than either emotion or dynamic intensity and points to increasing listener interest.

An overall view of the survey results for each cue and presenter may be seen in Figure 3.
It was thought that respondents who do not have English as their primary language would score the cues differently than those who were native English speakers. However, data revealed that results were about the same throughout the study. This would seem to support the concept that paralinguistic cues may have more to do with the intention of the message than with the actual words that are spoken, regardless of language. The choice of English for the presentations, among such an international group of respondents, was intentional in that international organizations tend to choose English as their corporate language. Therefore, leaders are expected to communicate in English and must be understood within that context. Also, media and public relation professionals listening to these leaders have the ability to impact the reputation and business of the organization by reporting what they hear the leader communicate. Therefore, it is essential that they are receiving the correct message in a credible manner they can believe in.
Credibility and palatability

In light of the data gathered, there needs to be a distinction made between credibility, palatability, and attention. For example, many people know that cod liver oil is good for them and that it contains omega-3 fat that has been proven effective in combating cholesterol. However, cod liver oil is not that tasty and unless something draws their attention to their specific need for it, it is doubtful they will go out of their way to take it. The relationship between credibility and palatability may be explained by figure 4.

Figure 4

<table>
<thead>
<tr>
<th>Listener’s attitude</th>
<th>Situation</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>I believe you and I want to.</td>
<td>High credibility and palatability.</td>
<td>Easy to accept.</td>
</tr>
<tr>
<td>I don’t believe you, but I want to.</td>
<td>Low credibility and high palatability.</td>
<td>A desire to understand and accept.</td>
</tr>
<tr>
<td>I don’t believe you and I don’t want to.</td>
<td>Low credibility and high palatability.</td>
<td>Extreme resistance toward understanding.</td>
</tr>
<tr>
<td>I believe you, but I don’t want to.</td>
<td>High credibility yet low palatability.</td>
<td>Difficult to accept.</td>
</tr>
</tbody>
</table>

Specific to this study, data would indicate that credibility (i.e. the belief that cod liver oil is truly healthy) is increased where there is greater fluidity, articulation, and sonority in the voice. In addition, when sonority, emotions, and dynamic intensity are used in an appropriate mix the message is easier to receive and therefore more palatable. It is often the hurdle of palatability that needs to be addressed when trying to reach constituents with the truth they need to hear. Whatever can be done to lower the threshold of resistance needs to
be done. Emotions and dynamic intensity can be useful in helping listeners accept the facts as pertinent and necessary to their situation. With regards to gaining and maintaining the listener’s attention, an appropriate blend of the paralinguistic elements of tempo, emotion, dynamic intensity, and sonority would prove effective to grab the listener’s interest and hold it, according to the statistics represented in this study. These observations answer the first research question, "How well do the primary paralinguistic cues of fluidity, articulation, sonority, tempo, emotion, and dynamic intensity increase channel optimization today?" by showing that they are interwoven with each other in order to achieve a higher level of communication.

The second research question asked, “Can these specific paralinguistic cues be learned and thereby improve the leader’s credibility?” According to survey, 81.4% of the respondents strongly agreed that paralinguistic cues could be improved through practice and taught to leaders. Fluidity and articulation can be improved through practice. The more one rehearses a script, the more one internalizes it to a point where it becomes spontaneous and thus improves fluidity. When the speaker knows what needs to be said and why it needs to be said, it is much easier to bring forth the proper emotion and dynamic intensity to match the desired reaction from the listener. Articulation can be improved by practicing difficult words until one can say them correctly. Also, decreasing the tempo makes articulation easier and clarity goes up as a result. Through external feedback, objective coaching, and diligent practice…people can get better at communicating their ideas.

Finally, the third research question asked, “What forms of modeling are most efficient in establishing credibility? According to the data, when the model of communication closely matches the message, credibility goes up. Presenter number two had an important economic message; yet his attempts at humor did not work, his voice sounded raspy, he did not maintain fluidity in his presentation and scored a 3.71/7 credibility level. However, presenter
number three was almost a direct opposite of presenter number two with a smooth flow, sonorous voice, perfect and clear articulation mixed with humor, emotion, dynamic intensity, and a high degree of passion that earned him a credibility score of 5.67/7. It was easy to see how he listened to the audience (speech convergence) and adjusted his delivery and timing. The feedback given him by the audience allowed him to interpret what was effective and what was not. No other of the presenters did this and their scores reflect it. By incorporating a hermeneutical phenomenological approach and understanding what his listeners were feeling and hearing, he was able to effectively alter the paralinguistic cues to optimize clarity, credibility, and receptivity. Specifically, with regards to the third research question, when a high degree of sonority, fluidity, and articulation are present – credibility will go up.
Chapter 5. SUMMARIES AND CONCLUSIONS

When a person knows where they are going, they are sure of their footing and know what decisions need to be taken along the way. The more familiar they are with the path ahead, the less hesitation in their steps and the more confidence they possess in what they are doing and where they are going. This confidence, knowledge, and experience is transferred to those who are following along and form a portion of the source credibility of the leader. The data revealed by this research showed how fluidity of delivery affects the message in much the same way. Fluidity instills confidence in the listener as they experience the confidence and clear direction of the speaker. Further, the listener’s receptivity is increased as the “threshold” of credibility the speaker needs to climb over is lowered by the growing confidence in the speaker. The listener can see more clearly the direction the speaker is going and comprehension is increased.

Articulation was shown in this study to be a great contributor to the clarity and credibility of the message. Hearing exactly what has been said is not always easy, particularly when the speaker has a pronounced dialect or does not enunciate when speaking. When a speaker is concerned that they are understood and that their words are acted upon, they are careful about the choice of their words and pronunciation. Data indicates that this attention to detail is transferred to the listener, aiding their trust in the speaker and message.

With regard to the paralinguistic cue of sonority, not everyone is born with a beautiful or forceful voice. Unfortunately, people are often stereotypified according to the sonority or sound of their voice. Depending on the quality of their voice, people may be judged as weak, insecure, belligerent, intelligent, or backward according to a study by David Addington (1968). Listeners cannot hear a message if they will not hear because of presuppositions
based on their opinion of the speaker’s voice. While clarity of the message is certainly affected by the quality, the credibility and receptivity are also affected as shown by this study. However, certain voice qualities can be altered by vocal exercises to improve credibility and receptivity as evidenced by a certain Toronto politician who received voice lessons after being criticized for having too shrill a voice (Louise, 2009).

Regarding the tempo of a speaker’s presentation, this research confirmed that clarity could be directly affected if the ability to articulate is decreased due to the speed of speech (Addington, 1971). In addition to a decrease in articulation affecting credibility and receptivity, tempo plays yet another role. A slightly higher tempo than normal may help maintain the listener’s attention by urging them to pay attention and not miss anything important that might be said (Stanley, 2006) or to keep them from being utterly bored by a very slow rate of speech.

*Emotion* was shown to help listeners better understand the intentions behind the words. The ability to “read between the lines” enabled by emotions increases both clarity and credibility when properly matched with the message. However, perhaps the role of emotion is greatest in the area of receptivity. Listener attitudes could be affected by adjusting and matching the use of emotions in accordance with the reactions of the listeners. This feedback loop is an important part of communicating with the listeners’ perspective in mind (Rickman, 1961).

Finally, with regard to *dynamic intensity*, the study revealed that this paralinguistic cue could, as emotions do, aid in clarifying the message and increasing receptivity when properly matched to the message and situation. However, the study also revealed that too much intensity or too little, as in a monotone presentation, may detract from credibility and receptivity.
Limitations of the study

An extended research involving more respondents would help to further assure the results this study, however due to the limited resources of time and money, such an endeavor was not possible when this study was made. By widening the survey to other organizations and cultures, the results could further support or even reveal an inconsistency in the data reported here. Since the geographical location of the study limited the number of respondents who spoke English as their primary language, it would be interesting to see what the response from an all-English group might be.

Further, the selection of video examples respondents viewed were based upon the researcher’s own subjective opinion as to what represented good or poor communication. Perhaps a method for a more unbiased selection could be found where independent judges could rate the videos for validity.

Further study

The respondents of this study consisted of individuals who spoke English as their primary language and many more who did not. Although it was thought initially that this would produce a distinct difference in results, it did not. Due to the level of similarity in responses among managers, non-managers, English speakers, and non-English speakers; it is theorized that paralinguistic cues may be universal in application. Further study in this area may prove of great benefit to communication studies and practitioners throughout the world and would certainly warrant further study. Therefore, an extended study duplicating the methods used in this study should be carried out among multiple organizations and acquire responses from several hundred in order to truly substantiate the results reflected in this study. In addition, a deeper study into the effects of tempo could prove useful. Apart from the
data revealed in this study, more could be learned regarding the role tempo plays in reflecting the amount of engagement the speaker has in what is being said.

Further, an interesting correlation between credibility and palatability arose as a result of the study. It would be of immense importance to motivational studies to initiate further research into this relationship as well.

Conclusions

The results of this study seem to confirm that there is a constant interplay of reaction and adaption between persons involved in a communication process as outlined by Giles’ accommodation theory (1973). The better one can match one’s communicative models or channel to the message, the higher the level of credibility and reception will be achieved. Indeed, it is this empathy of the communicator, or “Sender” as labeled by Bento (1960), that exhibits not only the rhetorical pathos of Aristotle that allows the sender to match or adapt those elements of presentation to better convey the intended meaning, but also the ability to see things from the perspective of the recipient that is a foundational element within Dilthey’s hermeneutical phenomenological theory of communication (Rickman 1961).

The pathos outlined by Aristotle “wins the speaker the right to be heard” by establishing a connection with the recipient. The use of paralinguistic cues allows the recipient to better connect with the speaker and thus improve the communication channel with regards to clarity, receptivity, and credibility. This channel refinement then makes possible the more accurate and efficient transmission of the logos, meaning word or reason as defined by Aristotle. It is this logos, better defined in this study as content, that is then weighed by the recipient as to its importance and how applicable it might be in their situation. The speaker might present with great emotion and establish a great level of connection with the recipient and have many valid things to say, but ultimately the recipient will question the
speaker’s credibility or ethos according to Aristotle. It is here that paralinguistic cues may be able to increase the speaker’s credibility and allow the recipient to accept and internalize the message.

As Shannon set out to improve the fidelity of audio signals in 1949 by optimizing the transmission channel, paralinguistic cues have shown that they can directly affect the clarity, credibility, and receptivity of the message. In addition, the paralinguistic cues studied in this research have revealed that improvements may be made to the recipient’s attitude toward the message. It was discovered that distinctions could be made between credibility, palatability, and attention. Further, combinations of paralinguistic cues could be employed to address the listener’s response to the attributes of clarity, credibility, and receptivity.

Just as the integration of multiple empirical senses heighten the experience of an event, so do the presence of multiple paralinguistic cues, working in harmony, improve the communication impact and internalization by the recipient. Paralinguistic cues are powerful enough to make even good news sound bad if not matched to the message. Conversely, according to Dr. Carol Goman (2011), they can also be used to make bad news more palatable. Hopefully, this study will not only aid leaders who wish to improve their communication, but also assist the consultancy world as it strives to help leaders in their communication in an objective and professional manner.
REFERENCES


Donne, J. (N.D.) No man is an island: Meditation XVII. *Devotions upon emergent occasions: Together with death’s duel*. Christian Classics Ethereal Library.


Hovland, C., & Janis, I., & Kelley, H. (1953). *Communication and persuasion* (pp. 1-55), Yale University, New Haven, CT.


The MCR communication model of Claude Shannon (1949)

The (S) MCR communication model by Benlo (1960)
APPENDIX 2

F.A.S.T.E.D. Survey questions:

Instructions:
In this survey, we want to measure how well the speaker matches his or her performance to the message. For example: did they speak too fast to be understood properly, were they too monotone and boring? Was their voice pleasant to listen to or annoying and did their emotions match the spirit of what they were saying?

Your responses are voluntary and confidential and your identity is completely anonymous. You do not have to answer any questions you do not wish to and may stop taking the survey at any time.

Please read each question and rate your level of agreement with each statement by checking the number/value that most closely represents your opinion.

You are also encouraged to use the “comments” line to expand on or clarify your responses when prompted. The survey should take between 15 and 20 min. to complete.

Thank you for your participation.

Please answer the following questions by ranking each of the following:

The following questions are designed to be answered by upper management, middle management, and external stakeholders representing media and public relation professionals. Please indicate which group you belong to as you respond to this survey.

- Managerial employee
- Non-managerial employee
- Media and/or Public Relations professional

Please indicate your age group:

21 – 30
31 – 40
41 – 50
51 – 70

Is English your primary language?

- Yes
- No

On a scale of 1 to 7, where 1 represents strongly disagree and 7 represents strongly agree, please click the button that most closely corresponds to your answer.
Example:
The speaker's **articulation** increased the **clarity** of the message.

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Strongly agree</th>
</tr>
</thead>
</table>

The speaker’s **articulation** increased the **credibility** of the message.

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Strongly agree</th>
</tr>
</thead>
</table>

The speaker’s **articulation** increased the amount of **information received**.

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Strongly agree</th>
</tr>
</thead>
</table>

The speaker can learn to **articulate** better.

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Strongly agree</th>
</tr>
</thead>
</table>

**Fluidity** – smoothness of speech as opposed to stammering or using fill words like “well” and “uh” or too many pauses

The speaker's **fluidity** increased the **clarity** of the message.

The speaker’s **fluidity** increased the **credibility** of the message.

The speaker’s **fluidity** increased the amount of **information received**.

Can fluidity be improved through practice?

**Articulation** – how well did the speaker articulate? Was it difficult to understand them because of slurred words, mispronounced words, or foreign accent?

The speaker's **articulation** increased the **clarity** of the message.

The speaker’s **articulation** increased the **credibility** of the message.

The speaker’s **articulation** increased the amount of **information received**.

Can articulation be improved through practice?

**Sonority** – voice quality…nice to listen to or too throaty, nasal, or odd

The speaker's **voice quality** increased the **clarity** of the message.

The speaker’s **voice quality** increased the **credibility** of the message.

The speaker’s **voice quality** increased the amount of **information received**.
Can voice quality be improved through practice?

**Tempo – the rate of speed with which the speaker speaks**

With regard to increasing *clarity*, how was the speaker’s tempo?

<table>
<thead>
<tr>
<th>Too slow</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Too fast</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

With regard to increasing *credibility*, how was the speaker’s tempo?

With regard to increasing *information received*, how was the speaker’s tempo?

Can tempo be improved through practice?

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

**Emotions – how well did the speaker’s emotions match what was being said. Did they help you understand better? Did they help you “read between the lines?”**

With regard to increasing *clarity*, how did the speaker use emotions?

<table>
<thead>
<tr>
<th>Too little</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Too much</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

With regard to increasing *credibility*, how did the speaker use emotions?

With regard to increasing *the amount of information received*, how did the speaker use emotions?

Can one’s use of emotions be improved through practice?

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

**Dynamics – the use of drama and dynamics in the voice, variations between loud and soft**

With regard to increasing *clarity*, how did the speaker use dynamic intensity?

<table>
<thead>
<tr>
<th>Too monotone</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Too dynamic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

With regard to increasing *credibility*, how did the speaker use dynamic intensity?

With regard to increasing *the amount of information received*, how did the speaker use dynamic intensity?

Can dynamic intensity be improved through practice?

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
How would you rate the overall *passion* of the speaker?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Very strong</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very weak</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
<td>7</td>
</tr>
</tbody>
</table>

How would you rate the overall *credibility* of the speaker?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Very strong</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very weak</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
<td>7</td>
</tr>
</tbody>
</table>
APPENDIX 3

Presentations 1-4

Survey data from stakeholders (internal and external)
  Internal stakeholders - managerial and non-managerial employees
  External stakeholders – media and public relations professionals

Key:
  Numbers represent average ranking by respondents on a 7-point Likert scale where 4 is seen as Normal or average. With regard to Fluidy, Articulation, and Sonority 4 is average, however the higher the number is regarded as better. With regard to Tempo, Emotions, and Dramatic Intensity 4 is normal. The closer to normal the better.

  Eng – those respondents whose native tongue is the English language
  Intl – those respondents whose native tongue is not the English language

Mean score –
  Two largest groups were the Intl. manager group with 49 respondents and the Intl. PR group with 29 respondents resulting in a total of 78 respondents. The mean score is based upon an average of these two groups. Intl. manager score x 49 + Intl. PR score x 29 / 78 = mean score.
<table>
<thead>
<tr>
<th>Paralinguistic Cue</th>
<th>Mean Score</th>
<th>Manager</th>
<th>Non-Manager</th>
<th>Media &amp; PR Manager</th>
<th>Non-Manager</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clarity (cl)</td>
<td>5.25</td>
<td>5.00</td>
<td>5.00</td>
<td>5.00</td>
<td>4.80</td>
<td>4.90</td>
</tr>
<tr>
<td>Credibility (cr)</td>
<td>5.00</td>
<td>5.00</td>
<td>5.00</td>
<td>5.00</td>
<td>5.00</td>
<td>5.00</td>
</tr>
<tr>
<td>Receptivity (rp)</td>
<td>5.75</td>
<td>5.00</td>
<td>5.00</td>
<td>5.00</td>
<td>5.00</td>
<td>5.00</td>
</tr>
<tr>
<td>Fluidity</td>
<td></td>
<td>5.75</td>
<td>5.25</td>
<td>5.15</td>
<td>5.25</td>
<td>5.25</td>
</tr>
<tr>
<td>Articulation</td>
<td></td>
<td>6.08</td>
<td>5.50</td>
<td>5.50</td>
<td>5.50</td>
<td>5.50</td>
</tr>
<tr>
<td>Sonority</td>
<td></td>
<td>5.42</td>
<td>5.25</td>
<td>5.25</td>
<td>5.25</td>
<td>5.25</td>
</tr>
<tr>
<td>Tempo</td>
<td></td>
<td>4.67</td>
<td>4.75</td>
<td>4.08</td>
<td>4.75</td>
<td>4.67</td>
</tr>
<tr>
<td>Emotion</td>
<td></td>
<td>2.50</td>
<td>2.25</td>
<td>2.92</td>
<td>1.75</td>
<td>2.00</td>
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<tr>
<td>Dynamic</td>
<td></td>
<td>3.17</td>
<td>1.50</td>
<td>2.00</td>
<td>3.08</td>
<td>1.75</td>
</tr>
</tbody>
</table>

**Presentation 1**

Corporate spokesperson

Channel attribute

Clarity (cl)

Credibility (cr)

Receptivity (rp)

Mean score

Presentation 1 Corporate spokesperson
<table>
<thead>
<tr>
<th>Channel</th>
<th>Clarity (cl)</th>
<th>Credibility (cr)</th>
<th>Receptivity (rp)</th>
<th>Overall Credibility (cred)</th>
<th>Manager</th>
<th>Non-manager</th>
<th>Media &amp; PR Manager</th>
<th>Non-manager</th>
<th>Media &amp; PR Manager</th>
<th>Non-manager</th>
<th>Overall Credibility (cred)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eng</td>
<td>3.10</td>
<td>1.20</td>
<td>3.10</td>
<td>1.20</td>
<td>3.40</td>
<td>1.33</td>
<td>3.20</td>
<td>1.00</td>
<td>3.20</td>
<td>1.00</td>
<td>3.60</td>
</tr>
<tr>
<td>Intl</td>
<td>3.27</td>
<td>2.00</td>
<td>2.73</td>
<td>3.46</td>
<td>3.42</td>
<td>3.75</td>
<td>3.46</td>
<td>3.50</td>
<td>3.23</td>
<td>3.50</td>
<td>3.88</td>
</tr>
<tr>
<td>Articulation</td>
<td>Eng</td>
<td>3.40</td>
<td>1.33</td>
<td>3.20</td>
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<td>3.56</td>
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<td></td>
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<tr>
<td>Intl</td>
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<td>3.75</td>
<td>2.44</td>
<td>3.65</td>
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<td>3.85</td>
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<td>3.46</td>
<td>3.67</td>
<td>3.46</td>
<td>3.67</td>
</tr>
<tr>
<td>Tempo</td>
<td>4.00</td>
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<td>3.50</td>
<td>2.33</td>
<td>4.50</td>
<td>4.75</td>
<td>4.00</td>
<td>4.44</td>
<td>4.08</td>
<td>4.08</td>
<td>4.08</td>
</tr>
<tr>
<td>Emotion</td>
<td>Eng</td>
<td>4.20</td>
<td>2.50</td>
<td>3.10</td>
<td>2.83</td>
<td>3.10</td>
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<td>4.00</td>
<td>3.85</td>
<td>3.85</td>
<td>4.00</td>
</tr>
<tr>
<td>Intl</td>
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<td>4.00</td>
<td>4.00</td>
<td>4.19</td>
<td>4.00</td>
<td>3.85</td>
<td>3.85</td>
<td>3.25</td>
<td>3.69</td>
<td>3.85</td>
</tr>
<tr>
<td>Dynamic intensity</td>
<td>Eng</td>
<td>3.80</td>
<td>2.50</td>
<td>3.30</td>
<td>2.50</td>
<td>3.50</td>
<td>3.16</td>
<td>4.32</td>
<td>3.72</td>
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<td>3.69</td>
<td>3.33</td>
<td>3.73</td>
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<td>3.69</td>
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<td>3.67</td>
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<tr>
<td>Overall Credibility</td>
<td>Eng</td>
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<td>3.71</td>
<td>1.31</td>
<td>3.71</td>
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<td>1.31</td>
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<td>1.31</td>
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<td>Channel attribute</td>
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<td>Receptivity (rp)</td>
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### Paralinguistic Cues and Their Effect on Leader Credibility

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<th>Credibility (cr)</th>
<th>Receptivity (rp)</th>
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<th>Articulation</th>
<th>Tempo</th>
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| **Media & PR**     |             |                  |                  |       |               |       |         |         |                     |
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| Intl               | 3.30        | 2.25             | 3.49             | 3.39  | 2.50          | 3.54  | 3.30    | 2.75   | 3.46                |