International Journal of Linguistics and Communication
June 2015, Vol. 3, No. 1, pp. 1-5
ISSN: 2372-479X (Print) 2372-4803 (Online)

Published by American Research Institute for Policy Development
DOI: 10.15640/ijlc.v3n1a1
URL: http://dx.doi.org/10.15640/ijlc.v3n1a1

Gesticulation and Effective Communication

Dr. Irving H. Smith[1] & Mr. Kendall Larry[2]

Abstract

Effective communication often involves several verbal and non-verbal elements. Based upon the findings of McNeill (2008, 1992), who established the effect of gesticulation upon verbal communication, this study was designed to investigate two aims. First, in concert with overt gestures, what are the other communicative aspects that can be identified by an audience that lead to clarity and understanding of the delivered content? Second, the other aim was to investigate the extent to which these same identified features imbue in a reflexive way the confidence of the speaker to internalize and convey confidence. Forty-three students (N=43) participated in a prospective survey-based study using a 6-item questionnaire. Results revealed that in addition to gesticulation, other nonverbal means of communication such as grooming, dress, and posture all contributed to the effective delivery of information to an audience while also demonstrating that these nonverbal features translated into improved confidence of the speaker to deliver information effectively. The broader implication of these results is that in the larger context of communicating information related to health, nonverbal elements that the audience perceives and the speaker exudes can be leveraged to deliver health related content more effectively.

Introduction

This study is the result of a health class term paper submitted by a second year student majoring in Sport Management at Coppin State University in Baltimore, Maryland. In addition to writing the 10-page term paper, students in these health classes were also required to present orally their papers before their peers. Many of the students enrolled in these health classes were either intercollegiate athletes and/or Sport Management majors. Their topic choices, many times, focused on intricate and somewhat recondite athletic injuries, treatments, and surgeries, thus the connection to and benefit of understanding and utilizing gesticulation in a health course.

Study Aim and Hypothesis

Based on the well-researched and well-characterized influence of gestures as non-verbal factors in the comprehension of content communicated from a speaker to an audience, it was further postulated that other non-verbal cues make up the constellation of features that lead to a listener's understanding. This study, with the support of the background work in gesticulation and non-verbal communication processes, sought to examine these features guided by the following two aims. First, in concert with overt gestures, what are the other communicative aspects that can be identified by an audience that lead to clarity and understanding of delivered content? Second, the other aim was to investigate the extent to which these same identified features imbue in a reflexive way the confidence of the speaker to internalize and convey confidence. In other words, we were interested in how these non-verbal activities augment the ability of the speaker to communicate effectively while simultaneously improving an audience or individual listener's ability to understand presented information.

[1] Health Sciences Chair, Coppin State University, Baltimore, Maryland.
[2] Student, Coppin State University, Baltimore, Maryland.

In the end, this study's aim and its results are to support the contention that via the multi-dimensional aspects of non-verbal elements in speaker-to-group or peer-to-peer interactions, effective communication harnesses these elements and will be inferred to apply to a larger context of the presentation of health related information. Moreover, successful communication benefits audiences and listeners with what we contend would be improved understanding and comprehension of health-related content. Therefore, it is the understanding of numerous dynamic factors that occur in varying degrees in the process of communication, i.e. the verbal and non-verbal features that should be exploited to impart information.

Background and Literature Review

Much study has demonstrated how gestures alone can influence informative power in face-to-face interactions. Moreover, when a person is communicating to another person or group, for example a teacher instructing a class or a coach motivating a team of athletes, gestures augment understanding beyond the words that are articulated. This phenomenon is known as gesticulation, which is best described as the combination of gestures and hand movements that accompany verbal communication (McNeill, 1992). It is the gestures and hand movements that help to make verbal communication more understandable. Interestingly, the literature also reveals how gesticulation can be vital by itself in non-verbal interaction. What follows are some highlights of these analyses. According to Kastens, Agrawal, and Liben (2008), "gestures are an integral part of communication among people of all ages and cultures." Teachers utilize gestures to explain lessons and students utilize gesture to explain what they've learned. Gestures benefit both the audience and the speaker in terms of cognition and perception and are particularly beneficial for educational researchers when attempting to understand the thought processes of students. Kastens et al. also suggest that gestures are important aspects of communicative understanding among adults, not just children and students.

Goldin-Meadow (2014) found that deaf children who had never learned sign language formed a means of communication through gesture called "homesign" in which both child and parent can communicate on a basic level. According to Goldin-Meadow, gesture not only helps children to communicate, it also helps them develop their verbal language vocabulary and cognitive/reasoning skills. In a similar study, Goldin-Meadow, Levine, Hedges, Huttenlocher, Raudensbush and Small (2014), found that gestures could be useful in identifying whether a child had some form of brain injury as well as determining which children would experience delayed speech. In this study, Goldin-Meadow et al. also examined the impact of parental speech and the impact of parent to child verbal communication. Erlich, Levine, and Goldin-Meadow (2006) found that children as young as five years old could answer more questions pertaining to their performance on spatial tasks when they were allowed to use hand gestures than those children who did not use gestures. Cook and Goldin-Meadow (2006) achieved similar results with children solving mathematics problems. O'Neill and Miller (2013) state that the "mind and body work closely together in early cognitive development." They found that children as young as 2 ½ years old who are in the habit of gesturing perform better on tasks even when they didn't gesture along with every task that they performed.

Beyond Gesticulation

Despite the power of gesticulation alone to inculcate learning and understanding, as we discovered in our study, other nonverbal elements make the process of communication multi-factoral. In studies of prosody, defined as the "intonation and rhythm of spoken language (Guellai, Langus, and Nespor, 2014)," it was found that individuals gesture even when their listener cannot see them, for example, in telephone conversations or in conversations with individuals who are blind. In addition, it was even discovered that many blind individuals will use gestures even though they have never seen gestures being used. Another feature includes the observation that, according to Guellai et al., "torso" movements and facial expressions also contribute to communication. In two pivotal studies, it was shown that hand-gestures in particular, but also in concert with other cues, induced certain emotional reactions which established a connection between the audience and the speaker. Casasanto and Jasmin (2010) conducted a study of the hand gestures of presidential candidates during the 2004 and 2008 elections and found that right handed gestures were associated with positive statements and thoughts and left handed gestures were associated with negative, regardless to whether the speaker was right handed or left handed. Arglye (2013) conducted a similar study of both gestures and body language in the Gerald Ford – Jimmy Carter debates and found that Ford employed a significantly higher level of gaze and stood more self-assuredly with his feet further apart than Carter who seemed to look down more often, blinked his eyes more often, and had a more "passive posture."

As mentioned above, concerning the multi-factoral aspects of communication, posture, gaze, dress, and facial expressions as contributing to communication were also studied by Argyle and found to be significant contributors to understanding on the part of both the audience and command of the subject matter on the part of the speaker. It was demonstrated by Gurney (2012) that gestures made by police investigators during criminal interviews could so influence testimony that witnesses would change their sworn statements, many times without even recalling the gestures or when they occurred. Suggestive gestures such as stroking a beard or tapping a ring finger could cause eyewitnesses to change their testimonies and state that a perpetrator had a beard when, in fact, no beard was present or state that the perpetrator wore a ring when no ring was present.

Conceptual Framework of the Study

This study was designed to determine whether gestures and hand movements as well as other nonverbal aspects of communication such as gaze and eye contact, posture and movement, and even dress and grooming contribute to clarity and understanding on the part of the audience and command of the subject matter on the part of the speaker. According to McNeill (1992), gesticulation is not the same as body language. McNeill suggests that body language can be characterized as body movements that are distinct from what most individuals understand as communication. McNeill states that even though gestures and language are different, they are also connected. He further states that gesticulation only occurs in combination with speech and that both are expressive in their own ways. Finally, McNeill states that gestures and speech "develop together in children."

Study Design

Forty-three students (N=43) enrolled in personal health classes during the Fall 2014 semester were surveyed. Of that number, 60.5% were intercollegiate athletes and/or Sport Management majors and 67.4% were either first or second year students. One survey instrument was rendered unusable because it contained identifying markings. All students were required to sign a Student Informed Consent document stating that they both read the Informed Consent document and had each component of the document explained to them in detail, including their right not to participate.

Methodology

Once the Student Informed Consent was read, explained, and signed, students were presented the survey instrument. The survey instrument is a 6-item questionnaire in which students anonymously evaluated the oral presentations of their classmates utilizing a Likert scale. The values of the Likert scale ranged from one to ten with one representing poor and ten representing excellent. Students were instructed that in order to keep the survey instrument anonymous not to record the names of presenters or evaluators or write any identifying marks on the instrument. The opposite side of the instrument contained language defining each of the categories. For example, "gaze" was defined as including eye contact and "movement" was defined as including moving around the room as well as "torso" movements. Once all presentations were completed and all survey instruments had been collected, each category was totaled and averaged out. The raw data was then converted to percentages and rounded off.

Results/Findings

We collected the responses to the questionnaires and performed an analysis of the data. The sample size represented the total number of students who consented to complete the questionnaire. Power was not calculated from this open cohort. However, the ordinal data yielded interesting stratification of the non-verbal elements rated by the respondents. Although no instructions or coaching was given to students pertaining to any of the categories prior to their oral presentations, many of the female students had their hair styled while many of the male students had haircuts and most of the students were professionally dressed for their presentations. "Grooming" and "dress" ranked the highest with percentages of 8.1% and 7.4%, respectively. This finding is in keeping with a study conducted by Kelly, Didie and Phillips (2014) on "Appearance Based Rejection Sensitivity" and Body Dysmorphic Disorder. Appearance Based Rejection Sensitivity is the fear one experiences when they think others don't approve of their looks or the "anxiety-provoking expectations of social rejection based on physical appearance (Kelly et al (2014)." Many times Appearance Based Rejection Sensitivity is heightened in individuals with Body Dysmorphic Disorder (BDD).

Body Dysmorphic Disorder is a severe disorder that affects between 1.5 - 2.5% of the population. According to the Anxiety and Depression Association of America (adaa.org), Body Dysmorphic Disorder is a "body-image disorder characterized by persistent and intrusive preoccupations with an imagined or slight defect in one's appearance." Individuals with BDD can obsess about their appearance for hours or even days to the extent that they cannot focus on any other areas of their life. Whereas BDD can affect all ages and sexes, it normally occurs in teens and adolescents. "Posture" was ranked third at 7.2%. At least three studies support the finding that posture enhances communication. Huang, Galinsky, Gruenfeld and Guillory (2010) found that posture communicates a sense of confidence, leadership, and power. Individuals who stand tall with open and expansive postures tend to communicate more control and power. The same can be said of sitting posture. Bohns and Wiltermuth (2011) found that a change in posture can actually make one feel more in control of situations and circumstances and more apt to tolerate distress. They state that when an individual stands or sits tall that individual can also influence the posture and the behavior of those around them. Eerland, Guadalupe, and Zwaan (2011) even go so far as to state that the manner in which one leans can influence their behavior, thinking, and reasoning. "Gestures" was rated at 6.6% followed by "movement" at 6.4% and finally "gaze" at 6.3%. Gaze (eye contact) and facial expressions are related to several studies. Bogart, Tickle-Degnen, and Ambady (2014) state that individuals who experience various forms of facial paralysis such as Parkinson's disease and Bell's palsy are not as well received as those who can smile, frown, or otherwise communicate emotion via facial expressions. Montague, Chen, Xu, Chewning and Barrett (2013) state that "doctors who make a lot of eye contact are viewed as more likeable and empathetic by patients." Their study was based on a survey of 110 patients and in addition to eye contact, the surveyed patients also gave higher marks to those doctors who extended other non-verbal common courtesies such as pats on the back and handshakes. Based on these findings, many nonverbal factors contribute to effective communication including grooming, dress, posture, gestures, movement, and gaze.

Discussion and Conclusion

Results revealed that in addition to gesticulation, other non-verbal means of communication such as grooming, dress, and posture all contributed to the effective delivery of information to an audience while also demonstrating that these nonverbal features translated into improved confidence of the speaker to deliver information effectively. The broader implication of these results is that in the larger context of communicating information related to health, nonverbal elements that the audience perceives and the speaker exudes can be leveraged to deliver health related content more effectively.

References

Anxiety and Depression Disorder Association of America. (2010-2015). Body dysmorphic disorder. adaa.org.

Argyle, M. (2013). The Social Psychology of Every Day Life. New York. Routledge.

Bogart, K.R., Tickle-Degnen, L., & Ambady. N. (2014). Communicating without the face: Holistic perception of emotions of people with facial paralysis. Basic and Applied Social Psychology. 36 (4). 309-320.

Bohns, V.K. & Wiltermuth, S.S. (2011). It hurts when I do this (or you do that): Posture and pain tolerance. Journal of Experimental Social Psychology. 48. 341-345.

Casasanto, D. & Jasmin, K. (2010). Good and bad in the hands of politicians: Spontaneous gestures during positive and negative speech. PLoS ONE 5 (7). DOI: 10.137/journal.pone.0011805.

Cook, S.W. & Goldin-Meadows, S. (2006). The role of gesture in learning: Do children use their hands to change their minds? Journal of Cognition and Development. 7(2): 211-232.

Eerland, A., Guadalupe, T.M. & Zwaan, R.A. (2011). Leaning to the left makes the Eiffel Tower seem smaller: Posture-modulated thought. Psychological Science. (12):1511-4.

Erlich, S.B., Levine, S.C. & Goldin-Meadow, S. (2006). The importance of gesture in children's spatial reasoning. Developmental Psychology. 42:6. 1259-1268.

Goldin-Meadow, S. (2014). Widening the lens: What the manual modality reveals about language, learning and cognition. Philosophical Transactions of the Royal Society B: Biological Sciences. 369 (1651). DOI: 10.1098/rstb.2013.0295.

Golden-Meadow, S., Levine, S.C., Hedges, L.V., Huttenlocher, J., et al. (2014). New evidence about language and cognitive development based on a longitudinal study: Hypothesis for intervention. American Psychologist. 69 (6), 588-599.

Guellai, B., Langus, A. & Nespor, M. (2014). Prosody in the hands of the speaker. Frontiers in Psychology. 5:700. DOI: 10.3389/psyg.2014.00700.

Gurney, D. (2012).Influencing others through gestures: Pitfalls for eyewitnesses. British Psychological Society. bps.org.

Huang, L., Galinsky, A.D., Gruenfeld, D. H. & Guillory, L.E. (2010). Powerful postures versus powerful roles: Which is the proximate correlate of thought and behavior? Psychological Science. 22(1): 95-102.

Kasten, K., Agrawal, S. & Liben, L. (2008). Research in science education: The role of gestures in geoscience teaching and learning. Journal of Geoscience Education. 56 (4): 362-368.

Kelly, M.M., Didie, E.R. & Phillips, K.A. (2014). Personal appearance-based rejection sensitivity in body dysmorphic disorder. Body Image. 11 (3). 260-5.

McNeill, D. (2008). Gesture and Thought. Chicago. University of Chicago Press.

McNeill, D. (1992). Hand and Mind: What Gestures Reveal about Thought. Chicago. University of Chicago Press.

Montague, E., Chen, P., Xu, J., Chewning, B. & Barrett, B. (2013). Nonverbal interpersonal interactions in clinical encounters and patient perceptions of empathy. Journal of Participatory Medicine. 5: e33.

O'Neill, G. & Miller, P. (2013). A show of hands: Relations between young children's gesturing and executive function. Developmental Psychology. 49 (8): 1517-28.