EFFECTIVENESS OF VERBAL AND NON-VERBAL COMMUNICATION FOR TEACHING AND LEARNING AT UNIVERSITY LEVEL

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ABSTRACT

Verbal communication is a major part of everyday interaction. Verbal communication is about the language, both written and spoken. Non-verbal communication, in contrast to verbal communication, is a silent language used to convey messages by gestures, eye contact, body movement, etc., as opposed to words. For better comprehension of students' concepts, the teacher should use their body language, eye interaction, and facial expressions. Teachers may encourage verbal and nonverbal communication with students to speed up learning with little effort. The Objective of the current research is to ascertain how verbal and nonverbal communication enhances students' learning process, the effectiveness of verbal and non-verbal communication in combination, and problems associated with interpreting verbal and non-verbal communication from students' perspective and their perceived effective learning. A sample size of 161 students with a confidence level of 95% and a confidence interval of 5% was determined for the survey. A convenient sampling technique was used to develop respondents from the target group. A well-constructed questionnaire was used to collect the data, and it was developed with the study's goals in mind. Statistical Package for Social Sciences (SPSS) was used to analyse it. According to the results, all non-verbal behavior like facial expression, eye contact, physical distance and pitch of voice has a very effective impact on students learning. Verbal and non-verbal communication encourages self-learning and constructive learning of students, develop cognitive skill in students, relate different skills with study and encourage creativity in students. However, there are some problems with nonverbal communication. As teachers less interpret non-verb communication, students often ignore the teacher's nonverbal communication, which is less serious behavior of teachers for performing non-verbal activity. Sometimes teachers feel shy while performing non-verbal activities, and students are not serious about learning from non-verbal.

INTRODUCTION

Communication is inherently more efficient than mere words alone, as it possesses the ability to convey meaning with greater precision and effectiveness. Furthermore, the Holy Quran provides numerous references to this theme, such as "You will recognize them by their appearance" for the compassionate and destitute, and "You will recognize them by the tone of their voice" for hypocrites. Imam Ali (R.A) likewise believed that one's outward appearance represented one's inner state. When a person conceals anything in his or her heart, it manifests itself in his or her facial expressions. No one can conceal anything in the unseen because it is visible in the person's careless words and face (Elumalai et al., 2022).

The level of social contact can be appraised largely by individuals who participate, exactly as only they are fully aware of their goals, though their interlocutors do not always understand them. The proposed linguistic concepts and nonverbal communication categories contribute to the research of interpersonal communication and enhance understanding of how it works. In contrast, researchers should be cautious and fair in the results of their research (Koutrotsiou et al., 2023). Studies have shown how knowledge domain, facial expression, and deictic gestures affect an agent's character, attitude towards the material, and memory. The relationship between the knowledge domain and facial expressions had a substantial impact on the attitude toward the information, according to the results. Either the presence or absence of facial expressions, however, had an impact on the procedural and attitudinal modules. Nevertheless, facial expressions significantly influenced the attitudinal module more positively compared to the absence of facial expressions. Conversely, the lack of facial expression had a more pronounced effect on the technical module, as indicated by Baylor (2011).

In the realm of education, non-verbal communication forms the basis for cultivating intimacy and fostering a sense of connection between the teacher and the student (Comadena, Hung, and Simonds, 2007). The teacher's facial expressions, eyes, voice, movements, and gestures collectively communicate confidence and control or their absence (Mackay, 2006). Emotional bonds between the student and the teacher are strengthened through non-verbal communication, as noted by Sime (2006). Liu (2001) highlights various purposes of non-verbal communication in the classroom, such as expressing emotions, conveying interpersonal attitudes, presenting personality, and enhancing verbal communication. The educator's response to a student during interactions is manifested through both verbal and non-verbal cues (Houser and Frymier, 2009).

Four nonverbal communication roles are used to augment, control, replace, and regulate. "All types of nonverbal communication have four features," they said while describing its qualities. First, the community or subculture to which you belong has developed a lot of specific nonverbal communication. Second, there's a chance that verbal and nonverbal cues can clash. Finally, a lot of nonverbal communication occurs subconsciously; you often aren't even aware of it. Fourth, your body language conveys your emotions and attitude. These qualities are regarded as the fundamental rules governing nonverbal communication (Abbo, 2021). The deictic gesture had a big impact on how people felt about content as well. Just the knowledge domain was found to be substantial and vital for recollection, with the other categories being negligible. The major influence of knowledge domain and facial expressions on agent persona was considerable, narrowed these down to the following six main purposes, i.e., Accentuation, Reinforcing, Contradicting, Controlling Repetition, and Substituting (O'Rourke, 2020).

Non-verbal Communication Approaches

The following are some of the NVC categories that are covered in this study:

Kinesics: Movement of the body

Kinetics is defined as a "system that involves body postures, facial reactions, and movement of both the limbs and the head, often referred to as body language" (Negi, 2009). These physical attitudes help to portray a feeling along with the depth of the emotions (Lewis, 2007) and are a vital component of the communication strategy.

Facial expression

Facial expressions are dynamic elements of a person that reveal their mentality, sentiments, intentions, joy, grief, unexpected rage, excitement, and so on. In non-verbal communication, the eyebrows are regarded as the best communicating features of the human face. Smiling, a glance, a sigh of relief, wrinkled brows, twisting the lips, and other expressions are examples of facial expressions that are continually changing and viewed as recognized by the person who receives them (Bhatti & Teevno, 2021).

Oculesics: eye contact

Eye contact is defined as movements in the facial area and eyes, such as staring (Boyd, 2000). The emphasis, orientation, and length of look in relation to other people are depicted by eye movement and eye contact. For example, when we concentrate, the students we teach constrict and expand when we are aroused (Khan & Nasim., 2009). Eye contact is a useful source of information and an amplifier of attitudes. We may apparently determine truth, deception, shock, satisfaction, anxiety, frustration, and other feelings via our eyes (Yang, 2017).

Proxemics: physical distance

Proxemics is the physical distance we place between ourselves and others, which is how we make use of distance or space for communication. It has classified the utilization of space into four types: personal, private, social, and public (Helmer & Eddy, 2003).

Pitch of voice

The nonverbal audio component of speech is known as paralanguage, and it involves the use of voice in communication. "Vocalics" or nonverbal clues found in an individual's voice. These 'para-verbal' cues include "sounds of the language that are employed, such as pitch, sound volume, and its variation," that 'occur with spoken language, communicate with it, and constitute a comprehensive system of communication' (Boyd, 2000). Indirect language deals with the way something is conveyed rather than what has been said (Yang, 2017).

Students' Perception

The definition of perception is the recognition and comprehension of events, things, and stimuli via the use of one's senses (sight, hearing, touch, and so on). Similarly, perception is defined in the Dictionary of Psychology as "the process of understanding objects or objective events through the senses" (Shokrollahi, 2014). Perceptions are our interpretations of what we perceive (via our five senses). Another view, direct perception, contends that perception is produced through the direct acquisition of information from the environment. Students' cognitive learning of grammar via online learning is superior to face-to-face learning. The perspectives of individuals of knowledge differ in this scenario due to the nature of the circumstances or problems individuals are dealing with. This may lead to the conclusion that perceiving and understanding the meaning of an object is a process that occurs based on the environment. Thus, a person's perspective of interpretative comprehension is their interpretation of their own experience (Aswani & Arafah, 2023). Student perception is the psychological definition of what we perceive, which, contrary to popular belief, is not often the same as what genuinely exists. They have the ability to perceive things in the manner they wish to rather than in the way they actually occur. Each person's unique viewpoint is based on that person's previous life experiences; thus, no two persons are likely to have the same perception of the same scenario because no two perspectives of individuals are the same. This is consistent with the claim that participants based their views on prior knowledge of the stimulus (Frank & Shaw, 2016). Perception is a motivating factor in the learning process, and the achievement or failure during a student's learning depends on how a subject is taught. Numerous pieces of evidence demonstrate the importance of detecting, interpreting, and valuing objects, knowledge, emotion, and motivation (Rahul et al., 2020). Students' perspectives can operate in practice and form a component of exploratory studies. They contribute equally to the learning-teaching process by offering comments and directions for future teacher growth based on their experiences. Based on the facts above, I decided that more research into nonverbal communication is required. There have been numerous past researches on nonverbal communication. However, they largely worked with undergraduates as research volunteers and stayed out of Indonesia. Furthermore, these studies mostly correlate nonverbal communication with student motivation, which tends to focus on how nonverbal communication affects students' motivation, whereas this study focuses on students' perceptions because students' perceptions towards their teachers have significance in achieving effective interaction in the classroom (Yahya et al., 2020).

METHODOLOGY

The present study is about the students' perceived effectiveness of teacher's verbal and non-verbal communication for learning at the University of Agriculture Faisalabad, sub-campus Burewala, Vehari. The goal of the current research is to ascertain how verbal and nonverbal communication are perceived as effective learning. The area of study was all departments on the University of Agriculture Faisalabad, sub-campus Burewala. The study's target population was selected among students in the departments of BS (Physics and Botany) by using a simple random technique. There were 277 students enrolled in these two departments. Using www.surveysystem.com, a sample size of 161 students with a confidence level of 95% and a confidence interval of 5% was determined for the survey. A convenient sampling technique was used to develop respondents from the target group. A well-constructed questionnaire was used to collect the data, and it was developed with the study's goals in mind. Statistical Package for Social Sciences (SPSS) was used to analyse it.

RESULTS AND DISCUSSION

Table 1 provides information about the age distribution of a group of respondents. The age groups are divided into "17 to 18," "19 to 20," and "Above 20." There are 45 respondents in the "17 to 18" age group, constituting 28.0% of the total. There are 38 (23.6%) respondents in the "19 to 20" age group. There are 78 (48.4%) respondents in the "Above 20" age group. This table also presents information on the gender distribution of a group of respondents. There are two categories: "Male" and "Female." There are 89 (55.3%) male respondents. There are 72 (44.7%) female respondents.

Table 1. Demographic information of respondents.

Age	Frequency	Percent
17 to 18	45	28.0
19 to 20	38	23.6
Above 20	78	48.4
Total	161	100.0
Gender		
Male	89	55.3
Female	72	44.7
Total	161	100.0

Table 2 provides information on the perceived effectiveness of facial expressions in non-verbal communication within a classroom setting. The assertion concerning students' motivation when the teacher acknowledges their engagement in studies through facial expressions in the classroom., garnered an average score of 3.60, signifying consensus among respondents. Similarly, the statement " The facial expressions of teachers have a positive impact on the teaching-learning process in the classroom " received a mean score of 3.55, also indicating agreement. The statement "Facial expressions generated by teachers during the teaching-learning process are understandable" received a mean score of 3, indicating a neutral stance among respondents. Other statements, such as those related to different expressions on the faces of teachers helping to understand concepts or the impact of anger and smiles on teachers' faces, received mean scores around 2.7 to 2.9, suggesting a relatively neutral perception among respondents.

Table 2 provides insights into the perceived effectiveness of eye contact in non-verbal communication within an educational setting. Statements such as "Student recognizes teachers' appreciation during the lesson from his/her eye contact" and "Teachers' regular eye contact in the classroom provokes students to prepare the lesson" both received mean scores above 3.5, indicating agreement among respondents. Other statements, such as "Student always ready for a question from the teachers when he/she makes eye contact in the classroom" and "Teachers' eye contact makes students attentive in the class," also received mean scores around 3.5, suggesting agreement. The statement regarding the revitalizing effect of teachers'

consistent eye contact on the classroom environment received a mean score of 3.02, signalling a relatively neutral perspective among respondents. The statement "Student recognizes teachers' response from his/her eye contact during lessons" received a mean score of 2.71, suggesting a neutral perception among respondents.

Table 2 provides insights into the perceived effectiveness of body movement in non-verbal communication within an educational context. The statement regarding enhanced student comprehension when teachers use hands to reinforce lesson concepts and the positive impact of teachers' body movements on students' understanding and engagement in narrated stories both received mean scores exceeding 3.5, demonstrating consensus among respondents. The statement related to the body movements of teachers having an impact on the classroom environment also received a mean score of 3.56, suggesting agreement. Statements such as "Student enjoys the teaching-learning process when teachers move his/her hands, shoulders, and head to make the lesson more interesting and informative" and "Body movements of the teachers during the teaching process help students in understanding the lesson" received mean scores around 3, indicating a relatively neutral stance among respondents. The statement "Students lose interest and feel unmotivated when teachers sit in the chair during the teaching process" received a mean score of 2.93, suggesting a neutral perception among respondents.

Table 2 provides insights into the perceived effectiveness of pitch of voice in non-verbal communication within an educational context. The statement concerning the challenges posed by a teacher's low pitch and tone in comprehending lessons, as well as the statement addressing students' difficulties in understanding fast-paced speech from teachers, both attained mean scores surpassing 3.5, signifying consensus among respondents. The statement regarding the captivating effect of a teacher's soft pitch on student attention in the teaching-learning process achieved a mean score of 3.71, indicating a consensus of agreement. The statement highlighting challenges in understanding teaching and lessons due to very high pitch in teachers' voices received a mean score of 3.60, further signifying agreement among respondents. The statement regarding the effectiveness of the rise and fall in teachers' voices in enhancing students' understanding of the topic garnered a mean score of 3.22, indicating a relatively neutral perspective among respondents.

Table 2 provides insights into the perceived effectiveness of spatial distance in non-verbal communication within an educational setting. The statement about students feeling discomfort and facing difficulty in understanding teaching when a teacher does not maintain proper distance in the classroom, as well as the statement about students feeling at ease in learning the lesson when teachers maintain proper distance, both obtained mean scores exceeding 3.5, signifying agreement among respondents. The statement indicating that teachers typically maintain a reasonable distance with students, ranging from 14 inches to 4 feet in the classroom, for the benefit of the teaching-learning process received a mean score of 3.52, suggesting consensus or agreement among respondents. The statement asserting that personal distance between teachers and students enhances the classroom environment, making it more conducive and comfortable for learning, received a mean score of 3.50, further indicating agreement.

Table 2. Effectiveness of facial expression in non-verbal communication.

Effectiveness of facial expression in non-verbal communication	Mean	S. D	Remarks
1. Students can experience motivation when the teacher acknowledges their engagement in studies through facial expressions in the classroom	3.60	1.57	Agree
2. The facial expressions of teachers have a positive impact on the teaching-learning process in the classroom.	3.55	1.71	Agree
3. Facial expressions generated by teachers during the teaching-learning process are understandable	3	1.36	Neutral
4. In class, different expressions on the face of teachers help to understand the concept	2.9	0.53	Neutral

5.	Students notice the facial expressions of the teacher when he/she enters the class	2.81	0.68	Neutral
6.	Anger on teachers' face also motivates me to take interest in the studies	2.73	0.85	Neutral
7.	Smile on teachers' face motivates students to take an interest in their studies	2.70	1.03	Neutral

Effectiveness of eye contact in non-verbal communication

8.	Students recognize teachers' appreciation during lessons from his/her eye contact	3.63	1.54	Agree
9.	Teachers' regular eye contact in the classroom provokes students to prepare lessons.	3.53	1.46	Agree
10.	Student always ready for a question from the teachers when he/she makes eye contact in the classroom	3.51	1.43	Agree
11.	Teachers' eye contact makes students attentive in class	3.50	1.2	Agree
12.	Teachers' regular eye contact makes the classroom's environment alive to the lesson taught	3.02	1.44	Neutral
13.	Students recognize teachers' responses from his/her eye contact during lessons	2.71	1.27	Neutral

Effectiveness of body movement in non-verbal communication

14.	Student understand the lesson more effectively when the teacher uses his/her hands to give additional meaning to the topic	3.64	1.46	Agree
15.	Teachers' body movements help students to understand and take more interest in stories narrated by teachers	3.58	1.53	Agree
16.	Due to the body movements of the teachers, the classroom environment becomes conducive to learning	3.56	1.53	Agree
17.	Student enjoys the teaching-learning process when teachers move his/her hands, shoulders, and head to make the lesson more interesting and informative	3.13	1.79	Neutral
18.	Body movements of the teachers during the teaching process helps student understand the lesson	2.93	1.18	Neutral
19.	Students lose interest and feel unmotivated when teachers sit in the chair during the teaching process	2.93	1.04	Neutral

Effectiveness of pitch of voice in non-verbal communication

20.	The lesson becomes challenging to comprehend when teachers use a very low pitch and tone in their voices.	4.02	1.39	Agree
21.	Students encounter difficulty in grasping the teaching when teachers speak rapidly and swiftly.	3.92	1.57	Agree
22.	A soft pitch in the teachers' voices captivates students' attention towards the teaching-learning process.	3.71	1.18	Agree
23.	The teaching and lesson comprehension are hindered by the very high pitch of the teachers' voices.	3.60	1.06	Agree
24.	The rise and fall in teachers' voices enhance students' understanding of the related topic.	3.22	1.01	Neutral

Effectiveness of spatial distance in non-verbal communication

25.	Students experience discomfort and encounter difficulties in understanding the teaching when a teacher fails to maintain an appropriate distance in the classroom.	3.85	1.32	Agree
26.	Students find it comfortable to learn the lesson when teachers maintain an appropriate distance in the classroom.	3.62	1.37	Agree
27.	Teachers typically maintain a reasonable distance with students, ranging from 14 inches to 4 feet in the classroom, which proves beneficial for the teaching-learning process.	3.52	1.13	Agree
28.	The personal distance maintained between teachers and students contributes to creating a classroom environment that is more conducive and comfortable for learning.	3.50	1.57	Agree

Scale: 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly agree.

Table 3 provides insights into the extent of students' learning through verbal communication, presenting data on different aspects. The statement "Develop confidence" received a mean score of 3.74, indicating agreement among respondents. Verbal communication is perceived to be effective in fostering confidence in students. The statement "Increase memorization" received a mean score of 3.67, suggesting agreement. Verbal communication is seen as a positive factor in enhancing memorization skills among students. The statement "Develop retention power" received a mean score of 3.52, indicating agreement. Verbal communication is perceived to contribute to the development of students' retention power. The statement "Increase collaboration between teachers and students" received a mean score of 3.25, suggesting a relatively neutral stance among respondents. Verbal communication's impact on collaboration is neither strongly agreed nor disagreed upon. The statement "Increase understanding" received a mean score of 2.94, indicating a neutral stance among respondents. The impact of verbal communication on increasing understanding is perceived with less agreement compared to other aspects.

Table 3. The extent of students' learning by verbal communication.

Sr.	The extent of students' learning through verbal communication	Mean	S. D	Remarks
1	Develop confidence	3.74	1.09	Agree
2	Increase memorization	3.67	1.69	Agree
3	Develop retention power	3.52	1.54	Agree
4	Increase the collaboration between teachers and students	3.25	1.56	Neutral
5	Increase understanding	2.94	1.12	Neutral

Scale: 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly agree.

Table 4 provides insights into the perceived effectiveness of both verbal and non-verbal communication in various aspects of teaching and learning. Statements such as "Encourage self-learning of students," "Relate different skills with study," "Develop cognitive skills in students," "Encourage creativity in students," "Encourage constructive learning in students," "Increase student's interest in learning," and "Utilize students' knowledge and experience" all received mean scores above 3.5, indicating agreement among respondents. Verbal and non-verbal communication are perceived as effective in achieving these objectives. The statement "Deliver detailed information to the students" received a mean score of 3.50, indicating agreement. Effective communication is seen as contributing to the delivery of detailed information. Statements such as "Transmission of conceptual knowledge," "Provide systematic knowledge to students," and "Develop problem-solving skills in students" received mean scores around 3, suggesting a relatively neutral stance among respondents. The effectiveness of communication in these aspects is perceived with less strong agreement compared to other objectives.

Table 4. Effectiveness of verbal and non-verbal communication.

Sr.	Effectiveness of verbal and non-verbal communication	Mean	S. D	Remarks
1	Encourage self-learning of students.	4.01	0.85	Agree
2	Relate different skills with study.	3.86	1.43	Agree
3	Develop cognitive skills in students.	3.81	1.27	Agree
4	Encourage creativity in students.	3.80	0.9	Agree
5	Encourage constructive learning to students.	3.71	1.47	Agree
6	Increase student's interest in learning.	3.70	1.24	Agree
7	Utilizes student's knowledge and experience.	3.59	0.92	Agree
8	Deliver detailed information to the students.	3.50	1.23	Agree
9	Transmission of conceptual knowledge.	3.43	1.43	Neutral
10	Provide systematic knowledge to students.	3.40	0.95	Neutral
11	Develop problem-solving skills in students.	3.08	0.82	Neutral

Scale: 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly agree.

Table 5 provides insights into the perceived problems associated with both verbal and non-verbal communication in an educational setting. Statements such as "Teachers' less interpreting of non-verbal

communication," "Students often ignore teachers' nonverbal communication," "Less serious behavior of teachers for performing non-verbal activity," "Teachers feel shy while performing non-verbal activities," "Students are not serious about learning from non-verbal," and "Teachers are not properly trained to perform nonverbal communication" all received mean scores above 3.5, indicating agreement among respondents. These problems are perceived as significant challenges associated with both verbal and non-verbal communication.

The statement "Students often feel a contradiction between verbal and non-verbal communication" received a mean score of 3.53, also indicating agreement. Inconsistencies between verbal and non-verbal communication are recognized as a challenge. The statement "Students can't understand non-verbal communication" received a mean score of 2.50, suggesting a relatively neutral stance among respondents. While this issue is recognized, it is perceived with less strong agreement compared to other problems.

Table 5. Problems associated with interpreting verbal and non-verbal communication.

Sr.	Problems associated with verbal and non-verbal communication	Mean	S. D	Remarks
1	Teachers' less interpreting of non-verb communication	3.83	1.04	Agree
2	Students often ignored teachers' nonverbal communication.	3.8	1.01	Agree
3	Less serious behavior of teachers for performing non-verbal activity	3.78	1.54	Agree
4	Teachers feel shy while performing non-verbal activities	3.72	1.12	Agree
5	Students are not serious about learning from non-verbal	3.58	1.42	Agree
6	Teachers are not properly trained to perform nonverbal Communication	3.56	1.27	Agree
7	Students often feel a contradiction between verbal and Non-verbal communication.	3.53	1.3	Agree
8	Students can't understand non-verbal communication.	2.50	1.1	Neutral

Scale: 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly agree.

CONCLUSIONS AND RECOMMENDATIONS

All the non-verbal behavior like facial expression, eye contact, physical distance and pitch of voice has a very effective impact on students learning. Verbal and non-verbal communication encourages self-learning and constructive learning of students, develop cognitive skill in students, relate different skills with study and encourage creativity in students. However, there are some problems with nonverbal communication. As teachers less interpret non-verb communication, students often ignore the teacher's nonverbal communication, which is less serious behavior of teachers for performing non-verbal activity. Sometimes, teachers feel shy while performing non-verbal activities, and students are not serious about learning from non-verbal.

Verbal and nonverbal communication training should be provided to teachers at all levels, and the abilities gained should be combined into their teaching methods. Facial expressions are the most common form of nonverbal communication, and when used correctly by teachers, they can help students understand the concepts delivered in the classroom. Maintaining eye contact with students in the classroom is critical for active engagement. Teachers' body movements temper students' interest and attention, especially while telling concepts and laws; consequently, teachers should actively use their body movements in their lectures. The modulation in teachers' voices, with a rise and fall, assists students in comprehending the concept, atmosphere, and finesse of the learning process. It is highly recommended for teachers to incorporate pitch variations or employ a rise and fall in the tone of their voices during instruction. The appropriate distance maintained between teachers and learners in the classroom is a crucial consideration. Adequate spacing between teachers and students promotes a sense of calm during the learning process and instills confidence in their ability to acquire knowledge. There is a recommendation for curriculum developers and policymakers to acknowledge

the significance of both verbal and nonverbal communication. It is advised to integrate these aspects into teacher education programs to ensure that prospective teachers are equipped with this essential skill. It is proposed that nonverbal communication skills be applied in educational settings at all levels of education.

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