

Influence of Covid-19 Regulations on Interpersonal Communication among University Students in Kenya

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Abstract

The study sought to investigate how interpersonal communication among learners at the university had been influenced by the covid-19 regulations. The specific objectives were to analyse the influence of using face masks in class on the interpretation of facial expressions among learners during lectures; to assess the impact of social distancing on the use of haptics among learners especially in class simulations during practical sessions; and to find out the impact of avoiding contact with people on students group work tasks done face to face. The quantitative approach was used in data collection and analysis. The target population was students at St. Paul's university church house campus who attended face-to-face classes during the May-August semester 2021. A sample of 50 students in this group was selected conveniently by the researchers. Data was collected through on-line questionnaires emailed to the subjects. The findings indicate that non-verbal communication influences to a great extent how messages are interpreted by the learners and therefore using of face masks hinders delivery of some non-verbal messages only conveyed best by facial expressions through the eyes and the mouth. Social distancing also affects the use of haptics during interactions and so during simulations some activities were curtailed by the regulations. In addition, the fact that there is no personal contact or minimal personal contact, demonstrations especially with the use of equipment was affected. Quality of group assignments was also affected because the students were not able to have physical meetings to do research; most was done online and compiled by a secretary. The output was therefore limited to only what was submitted virtually for compilation without conclusive discussion.

Keywords: *Interpersonal communication, university students, Covid-19 regulations*

1.0 Introduction

Interpersonal skill is the ability to interact with people through effective listening and communication (Ezeah, Ogechi, Ohia & Celestine, 2020). It is significant for students to have interpersonal skills because it helps them connect with people and benefits their personality development too. Generally, students learn interpersonal skills at school itself with their instructors and classmate (Elegbe, 2018). However, since, the first case of the novel coronavirus disease 2019 (COVID-19) was diagnosed in December 2019, the lives of many people have been radically affected. The worldwide spread of the virus has led governments to implement laws for social distancing and national lockdowns, resulting in changes to the behavioral patterns and day-to-day functioning of billions of people (Mazza, Marano, Lai, Janiri & Sani, 2020). The practice of social distancing has also significantly affected patterns of direct face-to-face communication among individuals. This practice is critical to mitigate the spread of COVID-19, but it also undoubtedly has consequences for the mental health and well-being of individuals (Huang, Cao, Zhou. Punia, Zhu, Luo, & Wu, 2021).

The COVID-19 pandemic has severely affected the way people communicate with each other. Precautionary measures to limit the spread of the virus necessitated a shift in the communication paradigm when it comes to greetings and handshakes (Vaterlaus, Shaffer & Pulsipher, 2021). The arising situation required people to adopt salutations that do not entail physical contact, such as the “peace sign,” the “hand on chest,” and the “namaste”. In addition, emphasis on personal spaces and social distancing markedly increased, with telecommunication witnessing a huge rise, as business meetings, conferences, and educational activities shifted to virtual communication via social applications, such as Zoom, google meet, Skype, and Microsoft Teams. The Covid-19 pandemic has caused serious changes in the educational landscape affecting 94% of the world’s student population in more than 190 countries (UNESCO, 2020). Most governments around the world have temporarily closed universities and schools in an attempt to contain the spread of the virus (Zhang et al., 2020). All academic activities have been switch to remote delivery, even in institutions in which online learning was not widely used (Sangster et al., 2020; Toquero, 2020).

Face-to-face communication, specifically, was majorly affected by the pandemic (Liu, Berlin, Kiti, Del Fava, Grow, Zagheni & Nelson, 2021). The need for face masks, as an important protective measure to decrease the spread of the virus, had a huge toll on interpersonal

communication. Facial expressions and gestures play a major role in facilitating interpersonal communication, comprehension, and the delivery of intended messages. As such, wearing face masks hindered the ability of seeing and understanding people's expressions during conversations, and decreased the impact of communicated material (Elegbe, 2018). Facial expressions play a prominent role in communication and relay of emotion across individuals. People perceive facial expressions off one another, and this helps them forecast events and situations, and develop responses to them (Vaterlaus, Shaffer & Pulsipher, 2021).

Despite its crucial protective role, the face mask poses challenges on daily face-to-face communications. Interpersonal communication describes the interaction between two individuals or more through oral or physical (gestures) interactions (Curş eu, Coman, Panchenko, Fodor & Raţ iu, 2021). Proper application of the protective mask involves covering the mouth and the nose, which muffles sound and makes it challenging to understand speech and some higher-pitched voices. Furthermore, face masks eliminate the roles of the middle and lower face in emotional expression, rendering its action units invisible to the receiving individual (Hermann, Nielsen & Aquilar-Raab, 2021).

Students do not learn and develop in isolation but embedded in a web of relationships which make up a social field. The quality of these relationships determines children's learning, development, and well-being (Rucinski et al., 2018). A great body of research addresses the social aspects of education (Durlak et al., 2011; Taylor et al., 2017), highlighting the importance of social emotional learning. Furthermore, it is largely agreed upon that acquiring social emotional skills is crucial for children's success and well-being in life. The paper sought to investigate how interpersonal communication among learners at the university had been influenced by the covid-19 regulations. The specific objectives were;

- i. To analyse the influence of using facemasks in class on the interpretation of facial expressions among learners during lectures
- ii. To assess the impact of social distancing on the use of haptics among learners especially in class simulations during practical sessions
- iii. To find out the impact of avoiding contact with people on students group work tasks done face to face.

2.0 Literature review

This paper uses engagement theory as the theoretical lens. The engagement theory was introduced to the literature by Kearsley and Shneiderman (1998). The underlying principle of engagement theory is that in order to make learning effective, students must be involved or “engaged” in their course of study through meaningful tasks and interaction with others (Tucker & Clarke, 2014). The engagement theory does not assume the need to support the educational process with the use of technology. However, technology may enable student engagement which could not have otherwise been accomplished. Therefore, it is used as a conceptual framework for technology-based learning and teaching (Pange et al., 2010).

According to this theory, to achieve student engagement, three components, linked to learning skills that emerge, are required. “Relate” represents the need for collaboration in learning and development of soft skills. “Create” means that students should be involved in assignments that are project-based, which requires defining problems and conducting original projects. “Donate” requires learning activities to be taken outside the academic environment and emphasizes the need for students to actively participate and contribute meaningfully to the wider community while learning (Kearsley & Shneiderman, 1998; Thompson, 2009).

Collaboration and involvement of the students are achieved with the use of communication, planning, management, and social skills, which are integral to working in teams (Tucker & Clarke, 2014). As a result, students engage by working together, seeking input and clarification from each other, motivating each other as well as learning about one another (Kearsley & Shneiderman, 1998). Becoming a part of a successful collaborative team allows students to effectively engage in the learning process and might be found useful in their future professional life. Collaboration is not a new approach in learning. However, historically speaking, students have been taught to work and learn on their own rather than in a team. As Kearsley and Shneiderman (1998) argue, collaborative learning increases students’ motivation to learn and gives them the opportunity to work in groups that are often quite diverse in terms of skills and backgrounds. It helps them to get an understanding of diversity and multiple perspectives.

Engagement theory in the computer-based learning environment does promote interaction. However, this interaction is understood as human interaction in the context of group activities, not individual interaction with an instructional program, measured, e.g., with the number of key

presses or mouse clicks. Therefore, computers and the internet use are regarded as communication tools in the educational process, and not just a form of media delivery device (Kearsley & Shneiderman, 1998).

A recent longitudinal study showed that, in general, the size and structure of older adults' social networks are stable over time (Cornwell et al., 2021). Evidence suggests that the relationships of older adults with their relatives and acquaintances have not improved in general during the pandemic (Goodwin et al., 2020). However, an important topic that has not received much attention so far is how changes in the frequencies of particular modes of social communication are connected with mental health in older adults.

Elegbe (2018) through a qualitative research method conducted a focus group discussion with 24 students within 4 sub-groups and in-depth interviews with 6 lecturers from 6 faculties in the University of Ibadan. Data collected were collated, analyzed and findings show that interpersonal communication has a positive influence on lecturer-student' relationship. Lecturer-student relationships aid students' cognitive, social and emotional growth, lecturers spending more time with students especially those who have challenges in some courses can improve positive interpersonal relationship between them and eventually contribute to students' academic learning.

Ezeah, Ogechi, Ohia and Celestine (2020) tested the effectiveness of interpersonal communication in awareness creation and knowledge about COVID-19 among rural communities in a developing country. We tested three hypotheses at 0.05 level of significance. The sample size was made up 470 participants. The questionnaire served as the instrument for data collection. In the analysis of data, both descriptive and inferential statistics were used. The results demonstrate that interpersonal communication is effective in creating awareness about COVID-19 among rural communities. It was also found that interpersonal communication was effective in improving knowledge about the pandemic among rural communications. We explored the implications of these findings on healthcare delivery.

3.0 Research Methodology

The study employed descriptive research design, as it is quantitative research. This quantitative research was used to describe the characteristics of the study variables. The study adopted a descriptive research design since the study gathered quantitative data that describes the nature

and characteristics of the influence of influence of Covid-19 regulations on interpersonal communication among university students in Kenya. The target population was students at St. Paul's university church house campus who attended face-to-face classes during the May-August semester 2021. A sample of 50 students in this group was selected conveniently by the researchers. Data was collected through on-line questionnaires emailed to the subjects. Data was analyzed by the use of descriptive statistics using the Statistical Package for Social Sciences (SPSS) and was presented through percentages, means, standard deviations and frequencies. A regression model was used to establish the effect of influence of influence of Covid-19 regulations on interpersonal communication among university students in Kenya. This helped to evaluate the relationships between the dependent and independent variables of the study. The regression was:

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \epsilon$$

Where;

Y = Interpersonal communication

X₁ = Use of facemasks

X₂ = Social distancing

X₃ = Group task avoidance

β₀= Constant Term;

β₁, β₂, β₃= Beta coefficients;

ε = Error Term.

4.0 Results and Discussion

4.1 Response Rate

The response rate was analyzed to show the representative from the sample size. The study administered a total of 50 questionnaires. A total of 43 questionnaires were filled and returned resulting to a 86% response rate

4.2 Demographic Analysis

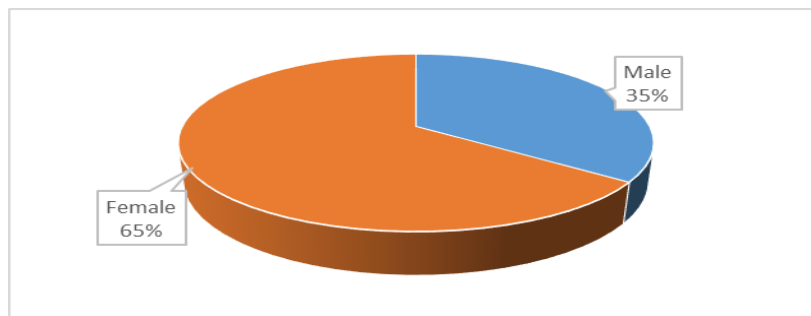


Figure 1: Gender of Respondents

The results show that majority of the respondents were female who represented 65% of the sample while 35% were male. This implies that the composition of the female respondents was higher than that of the male respondents.

The respondents were asked to indicate their age bracket and the results are as shown in Table 1.

Table 1: Age of respondents

Age	Percent
Below 19 years	2.3%
20-25	25.6%
26-30	51.2%
31-35	11.6%
36-40	4.7%
Above 40	4.7%
Total	100

The results show that majority of the respondents were 26-30 years at were between 51% followed by 20-25 at 25.6%. Those at 31-35 were at 11.6% while those at 36-40 and above 40 years tied at 4.7%. The least was below 19 years old at 2.3%. This implies that majority of the students were middle aged.

The respondents were asked to indicate their level of education and the results are as shown in the Table 2.

Table 2: Level of education

Education	Percent
Diploma level	7%
Degree level	67.4%

Master level	20.9%
PhD level	4.7%
Total	100

Results from Table 2 shows that majority of the students with 67.4% were of degree level followed by 20.9% of Master level. The Diploma level was at 7% while the least was 4.7% for PhD level.

4.3 Descriptive analysis

This section presents the descriptive results Interpretation of Facial Expressions, Haptics among Learners, Group task avoidance and Interpersonal communication. Numbers 4 & 5 (Agree and strongly agree) were grouped together as agree, 1 & 2 (strongly disagree and disagree) were grouped as disagree while 3 was neutral.

4.3.1 Interpretation of Facial Expressions

The first objective was to analyse the influence of using facemasks in class on the interpretation of facial expressions among learners during lectures. The descriptive statistics are presented in Table 3.

Table 3: Interpretation of Facial Expressions

Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	S.D
The use of face masks has affected interpretation of facial expressions	16.3%	20.9%	16.3%	16.3%	30.2%	3.23	1.49
Wearing facemasks has influenced my communication skills in learning	2.3%	9.3%	9.3%	44.2%	34.9%	4.00	1.02
The use of facemasks has scaled down my learning communication capabilities	9.3%	9.3%	14.0%	34.9%	32.6%	3.72	1.28
Face masks use has influenced how I communicate with others	11.6%	11.6%	11.6%	27.9%	37.2%	3.67	1.39
The use of face masks has sometimes led to misunderstanding between myself and colleagues	18.6%	11.6%	14.0%	27.9%	27.9%	3.35	1.48

Average 3.59 1.33

Using a five-point scale Likert mean, the normal mean of the reactions on statements on using facemasks in class on the interpretation of facial expressions among learners during lectures was 3.59 that implies that most of the students were concurring with a large portion of the statements; responses were varied as shown by a standard deviation of 1.33.

4.3.2 Haptics among Learners

The second objective was to assess the impact of social distancing on the use of haptics among learners especially in class simulations during practical sessions. The descriptive results are presented in Table 4.

Table 4: Haptics among Learners

Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	S.D
Social distancing has affected use of haptics among learners	11.6%	14.0%	14.0%	34.9%	25.6%	3.49	1.33
Social distancing has led to reduced clarity while performing haptics	25.6%	9.3%	9.3%	23.3%	32.6%	3.28	1.62
Social distancing has influenced communication skills in learning	2.3%	16.3%	9.3%	32.6%	39.5%	3.91	1.17
Social distancing has scaled down my learning communication capabilities	2.3%	11.6%	14.0%	30.2%	41.9%	3.98	1.12
Social distancing has influenced how learners communicate with others	7.0%	7.0%	20.9%	39.5%	25.6%	3.70	1.15
Average						3.67	1.28

Using a five-point scale Likert mean, the normal mean of the reactions on statements on use of haptics among learners in class simulations during practical sessions was 3.67 that implies that most of the students were concurring with a large portion of the statements; responses were varied as shown by a standard deviation of 1.28.

4.3.3 Group task avoidance

The third objective was to find out the impact of avoiding contact with people on students group work tasks done face to face. The descriptive results are presented in Table 5.

Table 5: Group task avoidance

Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	S.D
Group tasks avoidance has affected use of haptics among learners	11.6%	2.3%	11.6%	46.5%	27.9%	3.77	1.23
Group tasks avoidance has led to reduced face to face interactions in learning	9.3%	11.6%	14.0%	32.6%	32.6%	3.67	1.30
Group tasks avoidance has influenced communication skills in learning	16.3%	16.3%	9.3%	25.6%	32.6%	3.42	1.50
Group tasks avoidance has scaled down my learning communication capabilities	9.3%	7.0%	16.3%	27.9%	39.5%	3.81	1.30
Group tasks avoidance has influenced how learners communicate with others	16.3%	4.7%	7.0%	39.5%	32.6%	3.67	1.41
Average						3.67	1.35

Using a five-point scale Likert mean, the normal mean of the reactions on avoiding contact with people on students group work tasks done was 3.67 that implies that most of the students were concurring with a large portion of the statements; responses were varied as shown by a standard deviation of 1.35

4.3.4 Interpersonal communication

The dependent variable was to assess how 19 regulations on interpersonal communication among university students in Kenya. The descriptive results are presented in Table 6.

Table 6: Interpersonal communication

Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	S.D
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I have been able to interact with my colleagues during Covid-19 regulations	9.3%	7.0%	14.0%	32.6%	37.2%	3.81	1.28
I am able to communicate freely in school during Covid-19 regulations	7.0%	14.0%	9.3%	30.2%	39.5%	3.81	1.30
I am able to control and navigate social situations during Covid-19 regulations	14.0%	7.0%	9.3%	30.2%	39.5%	3.74	1.42
Covid-19 regulations have scaled down my learning and communication capabilities	11.6%	16.3%	4.7%	32.6%	34.9%	3.63	1.42
Covid-19 regulations have influenced how learners communicate with others	4.7%	23.3%	7.0%	32.6%	32.6%	3.65	1.29
Average						3.73	1.34

Using a five-point scale Likert mean, the normal mean of the reactions on interpersonal communication among university students was 3.73 that implies that most of the students were concurring with a large portion of the statements; responses were varied as shown by a standard deviation of 1.34.

4.4 Regression Analysis

The study sought to carry out regression analysis to establish the statistical significance relationship on Covid-19 regulations on interpersonal communication among university students. According to Chatterjee and Hadi (2015), regression analysis is a statistical process of estimating the relationship among variables. It includes many techniques for modeling and analyzing several variables, when the focus is on the relationship between a dependent and one or more independent variables. More specifically, regression analysis helps one to understand how the typical value of the dependent variable changes when any one of the independent variable is varied, while the other independent variables are held fixed (Gunst, 2018). The results are presented in Table 7.

Table 7: Regression Outputs.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.874a	0.763	0.745	0.50096
	Sum of Squares	df	Mean Square	F
				Sig.

Regression	31.567	3	10.522	41.928	.000b
Residual	9.787	39	0.251		
Total	41.354	42			

	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	4.681	0.508		9.218	0.000
Use of Facemask	-0.565	0.076	-0.657	-7.399	0.000
Social Distancing	-0.155	0.067	-0.190	-2.311	0.026
Group Avoidance	-0.303	0.096	-0.268	-3.174	0.003

The fitted model was;

$$Y = 4.681 - 0.565X_1 - 0.155X_2 - 0.303X_3$$

Where;

Y = Interpersonal communication

X₁ = Use of facemasks

X₂ = Social distancing

X₃ = Group task avoidance

The variables use of facemask, social distancing and group avoidance were found to be satisfactory variables in explaining interpersonal communication among university students. This is supported by coefficient of determination also known as the R square of 0.763. This means that the variables explain 76.3% of the variations in the dependent variable. This results further means that the model applied to link the relationship of the variables was satisfactory.

The findings further confirm that the regression model is significant and supported by F= 41.928, p<0.000) since p-values was 0.000 which is less than 0.05. The study conducted a regression of coefficient analysis to establish the statistical significance relationship between the independents variables on the dependent variable.

The regression of coefficients results show that use of facemask and interpersonal communication among university students in Kenya is negatively and significantly related (β= -0.565, p=0.000). The results further indicated that social distancing and interpersonal communication among university students in Kenya is negatively and significantly related (β= -0.155, p=0.026). Lastly, results showed that group avoidance and interpersonal communication among university students in Kenya is negatively and significantly related (β= -0.303, p=0.003).

The results imply that there was a negative relationship between the use of masks, social distancing and group task avoidance on interpersonal communication. Therefore, the increased use of the Covid 19-regulations had a negative and significant effect on interpersonal communication among university students in Kenya.

5.0 Conclusion

In conclusion, study indicate that non-verbal communication influences to a great extent how messages are interpreted by the learners and therefore using of face masks hinders delivery of some non-verbal messages only conveyed best by facial expressions through the eyes and the mouth. Social distancing also affects the use of haptics during interactions and so during simulations some activities were curtailed by the regulations. In addition, the fact that there is no personal contact or minimal personal contact, demonstrations especially with the use of equipment was affected. Quality of group assignments was also affected because the students were not able to have physical meetings to do research; most was done online and compiled by a secretary. The output was therefore limited to only what was submitted virtually for compilation without conclusive discussion.

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