

EDUCATION SYSTEM AND LEARNING HABITS NOW DAYS

The COVID-19 Outbreak

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Prepared by

KUNAL MALHOTRA
GNA University

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KUNAL MALHOTRA

Computer Science and Big Data Analytics Student, GNA University, Punjab, India.

Author. Tel.: +91 9877769078; Email: Kunal9988243618@gmail.com.

ABSTRACT: This study examined the effects of the COVID-19 outbreak on Education systems and the learning habits of individuals, with the help of quantitative research for different people's opinions on social media platforms for their online education. We begin with sentiment analysis on twitter tweets data with natural language processing and analyze what are their opinions on social meeting applications for their online learning or training process positive, negative, and neutral by any online sentiment analysis model. Then next we perform context word count analysis to find the popularity between the various social meeting applications with the same twitter tweets data as we used for sentiment analysis. And us to visualize the results in a report to understand what the trends of social meeting applications towards nowadays education system are and learning habits of peoples.

INTRODUCTION: This report helps to show which online social meeting applications are used or reviewed by peoples during COVID-19^[1]. And how new E-learning platforms are growing with the usage of online meeting applications by students, employees and, researchers to interact with each other, or gain knowledge. As because of lockdown in many countries due to COVID-19^[1] usage of social meeting apps or E-learning apps are increasing exponentially. And therefore, here we analyze what are their opinions about online social meeting apps, which are the most engaged online social meeting platforms and weather peoples are satisfied or dissatisfied with services that they get by sentiment analysis^[12]. For which we are using some online tools^[14] and services. And then we do context word count analysis to measure the popularity of online social meeting applications among the population.

SOURCE OF DATA: The behavior of populations on online meetings and E-learning platform applications is collected by analyzing different social media applications like Twitter, Facebook, and LinkedIn. In this paper, we focus on twitter data analysis in which we analyze the different text data which were given by twitter as a tweet^[2]. This tweet, provided by twitter can be treated as feedback or opinion which can be negative, positive, and neutral by an individual or say as the sentiment.

DESIGN OF THE STUDY:

Data Type: Tweets^[2] (Text, Paragraphs, and Numbers).

Data Collection: The data for Analysis can be download from twitter Developers Console^[4]. By providing twitter developer credentials for authorization.

Data Preprocessing: After data collection for analysis. Our data require text data preprocessing^[8] because it contains many unwanted data or texts which include links, stickers, and characters that affect our analysis to obtain useful insights.

ANALYSIS OF DATA: As said above we are using quantitative research^[5]. First, we perform sentiment analysis with natural language processing on our twitter tweets dataset. and this requires an online pre-built sentiment analysis model. Here we used a model which is provided by MonkeyLearn^[15] and perform or sentiment analysis. And then begin with the context word count analysis as shown in steps in figure.1 below. Where we performed our data analysis with some statistic languages (R^[10] and Python^[11]).

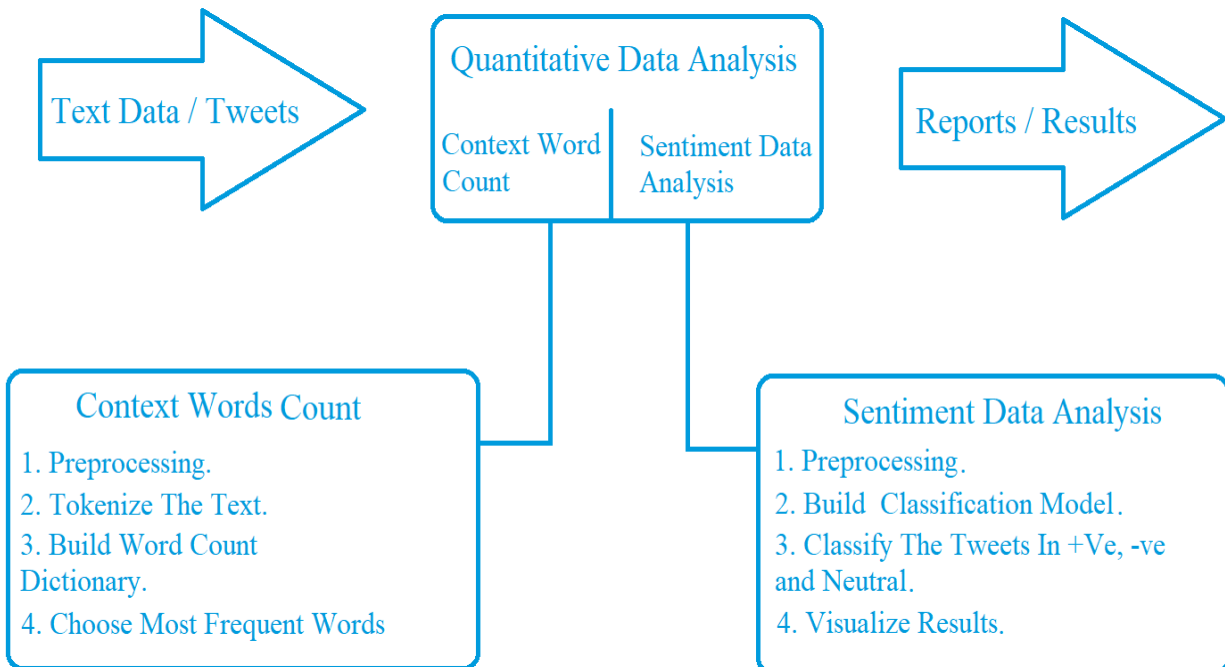


Figure: 1

CONCLUSIONS: Students, employees, and organizations are very heavenly effected by COVID-19 in terms of training, education, and learning new skills. People are widely using mobile social meeting applications to interact with each other. However, by the study of context word count analysis of text or tweets data we reach on a result that people are ore more attracted to Zoom^[6] and Hangout^[7] for their online meetings as shown in Figure.2 and Figure.3. On the other hand, and by sentiment analysis on our text or tweets data we can say that Zoom has more positive popularity than any other online social meeting applications like hangout as shown in Figure.5 and Figure.4.

Context Word Count Analysis:

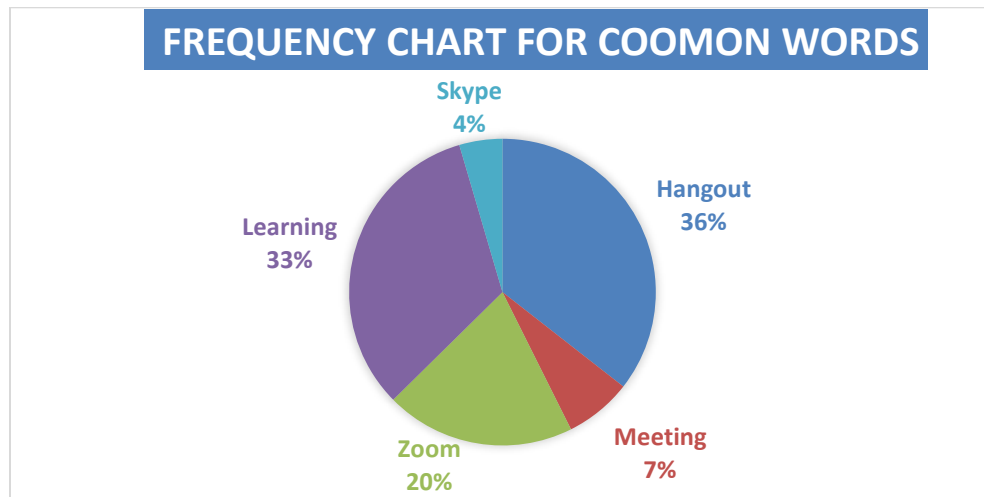


Figure: 2

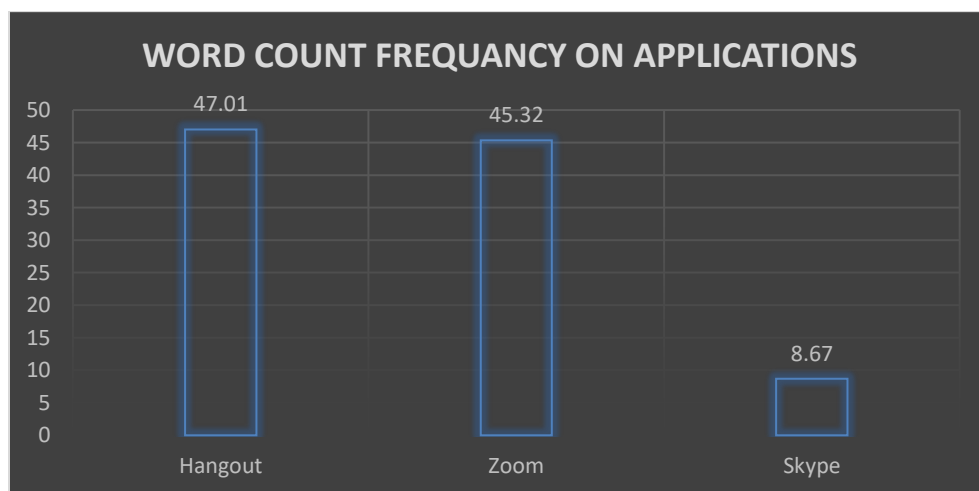


Figure: 3

Sentiment Analysis:

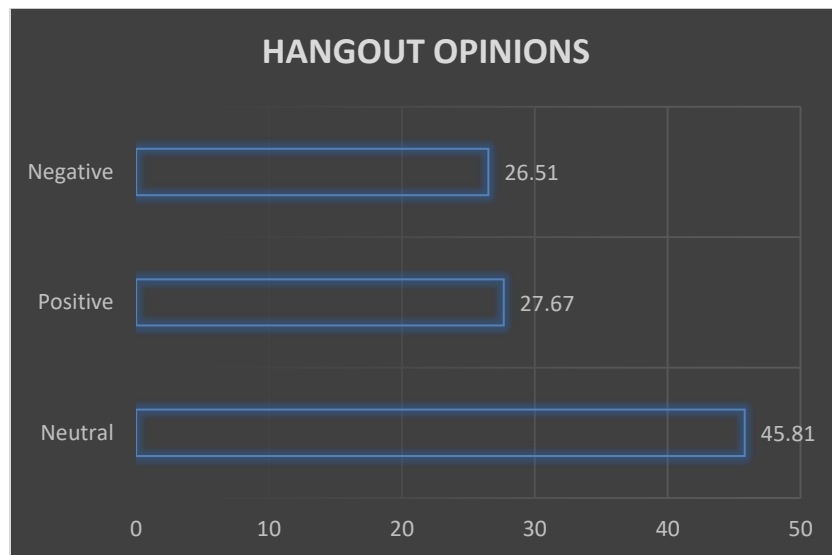


Figure: 4

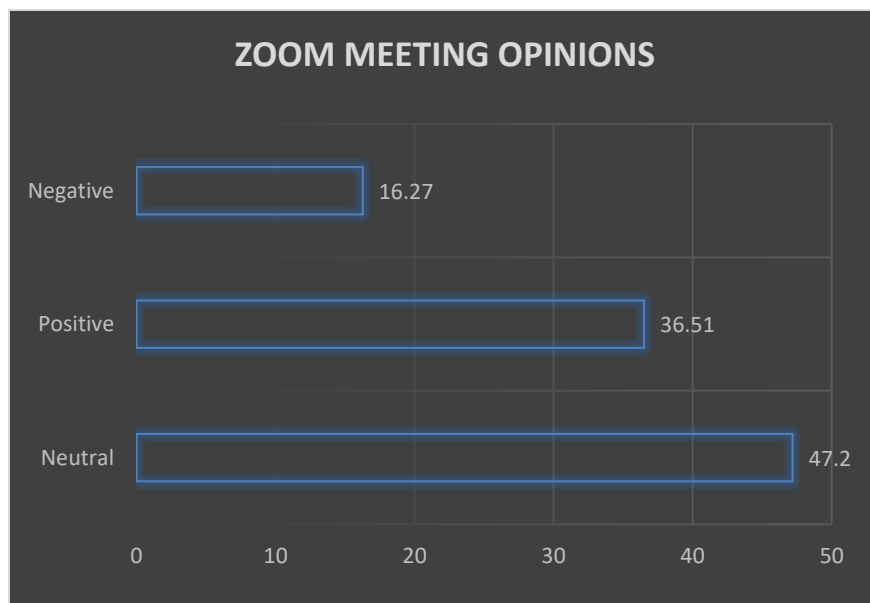


Figure: 5

APPENDIX:

WORDS COUNTS ON DIFFERENT #TAGS ON TWITTER

#GOOGLE HANGOUT		#LOCKDOWN		#ONLINECLASSES		#ONLINELEARNING		#VIRTUALINTERNSHIP		#ZOOM MEETING	
words	value	words	value	words	value	words	value	words	value	words	value
Hangout	330	Lockdown	589	onlineclas	94	online	139	virtual	110	zoomapp	94
google	322	covid-19	220	online	85	onlineleai	110	virtualleai	88	zoommee	70
meeting	70	lifted	220	pay	73	students	63	learning	59	security	30
zoom	47	coronavir	193	exam	37	learning	61	students	37	zoom	63
from	46	grocery	107	termpape	34	join	51	google	30	students	18
about	39	isolation	70	coronavir	33	knowledg	45	training	30	video	14
have	37	people	69	classes	31	learn	44	online	28	online	13
that	31	new	65	zoom	30	live	38	out	28	app	13
virtual	31	video	61	statistics	25	free	36	learn	28	workassig	10
during	30	travelling	60	learn	22	more	34	now	27	crore	8
come	29	beautiful	59	hangout	22	today	33	today	27	families	8
only	29	social	58	today	21	education	32	workshop	26	sessions	7
chat	25	train	58	physics	21	help	31	time	25	learn	7
meet	25	days	55	hire	20	covid	29	week	24	use	7
join	23	time	55	live	19	elearning	27	about	24	watch	7
just	22	media	54	free	18	out	27	make	23	lockdown	6
like	21	out	53	course	17	may	24	fun	23	know	5
students	21	nature	53	school	16	virtual	24	summer	22	am	5
they	21	blossoms	52	no	16	paper	23	next	21	safe	5
new	21	were	52	education	15	teaching	22	school	20	meeting	5
here	21	red	51	join	14	remotele	22	great	20	like	4
teachers	21	activities	50	from	14	program	21	one	18	all	4
great	21	bogies	50	class	14	class	21	like	17	zoom_us	4

Figure: 6

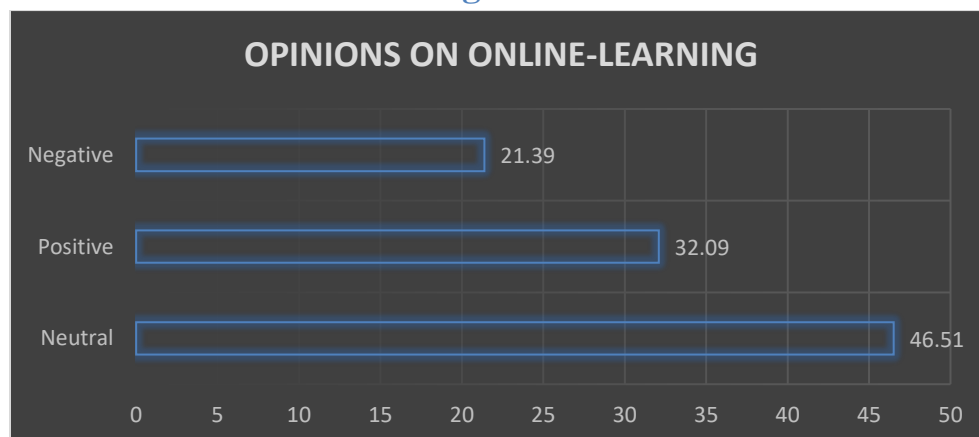


Figure: 7

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