

The descriptive research will be used in this research paper to establish an approach to the problem and get insights for the analysis. The initial point is the exploration of knowledge and ideas. The research findings are possibly connected or linked to previous research articles, which is why the nature of the relation is important with regard to causal variables and the effect.

3.2 Population and Sample Selection

The study targeted various stakeholders involved in behavior change communication strategies during COVID-19 emergencies in Myanmar. This includes government health agencies, non-governmental organizations (NGOs), healthcare professionals, social media users, and the general public. To cover a wide range of experiences and challenges in utilizing Facebook for behavior change communication methods during COVID-19 crises, participants were predominantly chosen from the Yangon area of Myanmar using random sampling method, targeting Facebook users in Yangon aged 18-65, where each individual of the targeted population had an equal chance of being selected. To assess variations in digital literacy, technology access, and engagement with behavior change communication on Facebook, the study focused on participants across different age ranges. These respondents are varied in age from 18 to 65, encompassing both younger and older demographics. The sample is collected 50 respondents from 18 to 33, second 50 respondents from 34 to 50 and the last 50 respondents from 51 to 65 age group with a total of 150 respondents. This random sampling approach helped maintain proportional representation across different age demographics while minimizing selection bias. The sampling process was conducted through online channels, primarily utilizing Facebook's community groups and networks, with careful attention to maintaining randomization within each age stratum.

The survey aims to collect data on how people have been using Facebook to communicate changes in behavior during the COVID-19 pandemic. The survey were distributed online through Facebook messenger and community groups, targeting

users who have interacted with COVID-19-related content. Participation would be voluntary, with appropriate consent obtained.

A coding framework would be developed to categorize the content of Facebook posts, including informative, non-informative and calls to action content. This will enable systematic analysis of how BCC messages were constructed and delivered. All data collected are treated with strict confidentiality. Personal identifiers are removed to protect the privacy of respondents.

3.3 Research Instrument

This study employs a quantitative research methodology to systematically examine the effectiveness of Facebook as a behavior change communication platform during COVID-19 emergencies in Yangon, Myanmar. The research instrument primarily consists of a structured survey designed to collect precise, measurable data about COVID-19 digital information received from Facebook, digital engagement, and pandemic response behaviors.

The survey methodology was carefully constructed to quantify digital literacy levels, measure Facebook usage patterns during the COVID-19 pandemic, assess the impact of behavior change communication strategies, and evaluate the effectiveness of information dissemination through Facebook. By utilizing a comprehensive survey approach, the study aims to generate empirical insights into the role of Facebook in BCC during COVID-19 public health during emergency situations.

The data collection process involved a random sampling of 150 participants in Yangon, with survey administration conducted both online. The instrument incorporated closed-ended questions, Likert scale items, demographic queries, and structured inquiries about Facebook engagement and information reception. The survey was done through Google Forms which is an online survey platform. Statistical analysis was performed using SPSS software, employing correlation and regression analyses to identify significant relationships and patterns in communication effectiveness.

3.4 Instrument Pretest

The primary focus of the pilot test was to examine how clear, organized and understandable the questionnaire used to evaluate Facebook's role in behavior change communication (BCC) during COVID-19 pandemic among youths in Yangon, Myanmar was. Furthermore, it sought to detect any possible problems regarding the formulation of questions in surveys as well as their interpretation by interviewees before collecting data at large scale.

For sample size stand point, the researcher used 20 respondents in the pilot test, which is appropriate for evaluating the instrument's effectiveness before carrying out the full-scale study. The participants were chosen from a demographic that is similar to those of the target population for the main study. The sample consisted of individuals who are aged between 18-33 years and who frequently use Facebook and live in Yangon, Myanmar. Each of them took about 15 minutes to complete an online survey.

In average, it took respondents 12 minutes to complete the survey, which falls within the acceptable range for surveys. Most of the questions were perceived to be relevant in relation to COVID-19 behavior change communication. The online survey tool worked as intended (through Google form). There were no serious technical issues faced by participants during the pilot test. They suggested changing the questions to more specific experiences or strategies concerning COVID-19 communication.

The pilot test provided useful insights in terms of strengths and weaknesses about the research tool. Feedback from participants revealed that most questions were relevant and clear but some technical as well as terminological changes were necessary in order to improve accuracy and efficacy of the survey. The revision was made based on feedback from this research advisor and findings from pilot test. The revision greatly improved the general quality of this questionnaire thus making it easier for intended respondents to use. Furthermore, the pilot test validated

that online survey platform worked effectively when collecting data which assured its use for large-scale research study.

3.5 Data Collection Procedure

The data collection procedure for this study was meticulously designed to ensure systematic and comprehensive gathering of information about Facebook's role in behaviour change communication during COVID-19 emergencies in Yangon, Myanmar.

Prior to initiating data collection, the research obtained ethical clearance from research Advisor. A comprehensive research protocol was developed, detailing specific steps for sharing the survey questionnaires, survey administration, and data management. Informed consent forms were carefully prepared to explain the study's purpose, participant rights, and confidentiality measures.

Participant recruitment employed a random sampling method, targeting Facebook users in Yangon aged 18-65. The collection strategy incorporated multiple approaches, including sharing study invitations through local community Facebook groups, utilizing snowball sampling techniques, and collaborating with local health communication networks. This approach ensured a diverse and representative sample of participants.

The survey was administered online using Google Forms, which provided a standardized and accessible platform for data collection. The survey instrument comprised carefully constructed sections, including demographic questions, closed-ended inquiries about Facebook usage, Likert scale items measuring communication effectiveness, and structured questions about COVID-19 information reception.

The data collection process was conducted over a four-week period from 25 January to 7 February 2025, allowing sufficient time for participant engagement and response collection. Periodic reminders were sent to maximize response rates and ensure comprehensive data gathering. This approach balanced the need for thorough data collection with participant convenience.

Data management was a critical component of the research methodology. Collected data were immediately anonymized and stored in a secure, password-protected digital environment. Multiple backup systems were implemented to prevent potential data loss, and the data were prepared for statistical analysis using SPSS software.

Ethical considerations remained paramount throughout the data collection process. The research adhered to strict ethical guidelines, ensuring voluntary participation, providing participants the option to withdraw at any time, maintaining complete anonymity, and maintaining transparent communication about research objectives.

Data validation was conducted through comprehensive checks for incomplete responses, identification and removal of duplicate entries, and preliminary data cleaning before analysis. This approach ensured the integrity and reliability of the collected data.

The systematic and methodical approach to data collection allowed for a comprehensive examination of Facebook's role in behaviour change communication during the COVID-19 pandemic in Yangon, Myanmar, providing valuable insights into digital communication strategies during public health emergencies.

3.6 Data Analysis

Data analysis is an approach to de-synthesizing data, documents, and empirical knowledge in order to answer research questions- to collect facts and figures to solve the research issue. Review of the data helps to explain the cause-and-effect principle and identify solutions to a particular problem. Data analysis is used to look for accepted methods and technology and to draw acceptable inferences from models and relationships (e.g., correlation).

The questionnaires were based on multiple options, brief responses to questions and questions on the Likert-Scale, quantitative study questions. Independent and dependent variables; the correlation is inferred as well. The results obtained after

the analysis are scrutinized and objectively, logically taking into account for the analysis.

Descriptive statistics will be used to summarize the data, providing an overview of the engagement levels for different types of BCC posts. Multiple regression analysis will be employed to determine the extent to which various factors: self-efficacy, media literacy, behavioral observation, normative beliefs, digital literacy and engagement metrics predict engagement with BCC messages on Facebook and subsequent behavior change. This will help in identifying the most influential factors in the success of BCC efforts.

The mean value of five-point Likert Scale items is interpreted as follows:

- The score among 1.00 – 1.80 means strongly disagree
- The score among 1.81 – 2.60 means disagree
- The score among 2.61 – 3.40 means neutral
- The score among 3.41 – 4.20 means agree
- The score among 4.21 – 5.00 means strongly agree.

Based on the synthesized findings, conclusions will be drawn regarding the effectiveness of Facebook as a platform for BCC, the factors that most significantly influenced behavior change, and the implications for future public health communication strategies. The study will conclude with a discussion of practical implications for public health agencies, policymakers, and communication practitioners, providing recommendations in Chapter 5 for enhancing the use of Facebook in future BCC efforts.

CHAPTER 4

FINDINGS

This chapter aims to analyze about leveraging Facebook for effective behavior change communication in responding to COVID-19 emergencies in Yangon, Myanmar. In this chapter, the analysis of leveraging Facebook for effective behavior change communication in responding to COVID-19 emergencies is shown such as descriptive, correlation and multiple regression analysis.

4.1 Results of Descriptive Statistics on Samples' Demographic Characteristics

The following Table (4.1) summarizes the responses based on the provided sample size of 150 respondents, divided into three age groups (18-33, 34-49, and 50-65) with 50 respondents each.

Table 4.1: Demographic Profile of the Respondents

Question	Age 18-33	Age 34-49	Age 50-65	Total
SECTION (A): DEMOGRAPHIC PROFILE				
Gender				
Male	25	20	15	60
Female	25	30	30	85
Non-binary	0	0	5	5
Age				
Under 18	0	0	0	0
18-33	50	0	0	50
34-49	0	50	0	50
50-65	0	0	50	50
Educational Background				
High School or equivalent	15	15	25	55
Some college or vocational training	20	20	10	50
Bachelor's degree	10	10	10	30
Master's degree or higher	5	5	5	15

Table 4.1: Demographic Profile of the Respondents

Question	Age 18-33	Age 34-49	Age 50-65	Total
SECTION (A): DRMOGRAPHIC PROFILE				
Occupation				
Student	30	0	0	30
Employed full-time	10	35	30	75
Employed part-time	5	10	10	25
Unemployed	5	5	5	15
Other (please specify)	0	0	5	5
Income				
Less than 400,000 MMK	15	10	20	45
400,000 – 800,000 MMK	20	25	10	55
800,000 – 1,200,000 MMK	10	10	15	35
1,200,001 – 1,600,000 MMK	5	5	5	15
More than 1,600,000 MMK	0	0	0	0
SECTION (B): FACEBOOK USAGE AND COVID-19 INFORMATION				
How frequently do you use Facebook?				
Multiple times a day	35	30	20	85
Once a day	10	10	15	35
2-3 times a week	5	10	10	25
Once a week	0	0	5	5
Rarely	0	0	0	0
Have you encountered COVID-19-related content on Facebook in your free time?				
Yes	50	50	50	150
No	0	0	0	0
What type of COVID-19 content have you come across?				
News updates	35	40	30	105

Health guidelines	40	35	40	115
Infographics	30	25	25	80
Personal stories/testimonials	25	20	15	60
Community initiatives	20	15	20	55
Other (please specify)	5	5	5	15
How accurate information do you find the COVID-19 content on Facebook?				
Very informative	20	15	10	45
Informative	25	30	30	85
Neutral	5	5	10	20
Not very informative	0	0	0	0
Not at all informative	0	0	0	0

Source: Survey Data (January 2025)

The gender distribution shows a majority of female respondents across all age groups, with a small representation of non-binary individuals in the 50-65 age group. The distribution of educational backgrounds shows a range of qualifications among respondents, with a concentration of high school and some college or vocational training among the younger age group and a higher representation of bachelor's degrees and above in the older age groups.

Most respondents are employed full-time, with students predominantly in the 18-33 age group. There are a few respondents who are unemployed or in other occupations. The income distribution reflects varying income levels, with the majority in the 400,000 – 800,000 MMK range, and very few earning more than 1,600,000 MMK. Most respondents use Facebook multiple times a day, with a small number using it once a week or rarely.

All respondents have encountered COVID-19-related content on Facebook. Respondents have come across various types of content, with health guidelines and news updates being the most common. The majority of respondents find the COVID-19 content on Facebook informative, with a smaller number finding it very informative.

are for frequently sharing content and using Facebook to stay connected (Mean = 3.47), indicating these are areas where engagement is more varied among users.

4.2.5 Normative Beliefs

The fourth variable of leveraging Facebook Factors, normative beliefs are computed as follows. The respondents have to answer five statements. And then, mean values and overall mean of trust towards this dimension are presented in Table (4.6).

Table 4.6: Normative Beliefs

Sr. No.	Characteristics	Mean	Standard Deviation
1	People around me think it is appropriate to use Facebook to disseminate official health guidelines and updates related to COVID-19.	4.00	1.03
2	People in my network believe it is important to support local businesses and initiatives through Facebook during the pandemic.	3.83	1.10
3	In my social circle, there is a belief that using Facebook to provide emotional support and encouragement during COVID-19 is important.	3.70	1.01
4	Others think it is appropriate to share personal stories or experiences related to coping with the pandemic on Facebook.	3.82	.92
5	Using Facebook for coordinating and offering help to others during COVID-19 is considered socially responsible by those around me.	3.60	1.05
	Overall Mean	3.79	.86

Source: Survey Data (January 2025)

According to Table (4.6), the overall mean score of 3.79 indicates that, on average, there is a strong positive perception among people regarding the use of Facebook for various supportive activities during the COVID-19 pandemic. People

generally believe it is very appropriate to use Facebook to disseminate official health guidelines and updates related to COVID-19. This characteristic has the highest mean score (4.00), indicating strong social approval. The standard deviation indicates some variability in opinions, suggesting that while many strongly agree, there are some differing views. The lowest mean score is for coordinating and offering help (Mean = 3.60), indicating that while still viewed positively, there is slightly less consensus on this activity.

4.2.6 Digital Literacy

The fifth variable of leveraging Facebook factors, digital literacy is computed as follows. The respondents have to answer five statements. And then, mean values and overall mean of behavior change communication towards this dimension are presented in Table (4.7).

Table 4.7: Digital Literacy

Sr. No.	Characteristics	Mean	Standard Deviation
1	I feel confident using Facebook to find and access information related to COVID-19.	3.85	.97
2	I understand how to engage with and share content responsibly on Facebook to prevent the spread of misinformation about COVID-19.	4.18	.96
3	I am comfortable participating in online discussions or groups on Facebook to learn more about COVID-19 and share my own experiences.	3.83	.91
4	I am confident in my ability to navigate Facebook's interface and features to access COVID-19-related content effectively.	3.76	1.05
5	Overall, I consider myself digitally literate when it comes to using Facebook for COVID-19-related purposes.	3.82	1.02
	Overall Mean	3.89	.79

Source: Survey Data (January 2025)

According to Table (4.7), the overall mean score of 3.89 indicates that, on average, users feel confident and consider themselves digitally literate in using Facebook for COVID-19-related purposes. Users show a strong understanding of how to engage with and share content responsibly on Facebook to prevent the spread of misinformation about COVID-19. This characteristic has the highest mean score (4.18), reflecting high confidence and awareness. The standard deviation is relatively low, indicating consistent understanding across users. The lowest confidence is in navigating Facebook's interface (Mean = 3.76), with the highest variability (SD = 1.05), indicating that some users may find the platform's navigation challenging.

4.2.7 Engagement Metrics

This study measures the means of engagement metrics with five characteristics. The mean value for each item and the overall mean values are shown in the following table (4.8).

Table 4.8: Engagement Metrics

Sr. No.	Characteristics	Mean	Standard Deviation
1	I regularly like or react to posts that provide valuable COVID-19 information on Facebook.	3.81	.99
2	I frequently share or repost COVID-19 updates and information with my Facebook network.	4.05	1.03
3	I have joined or actively participate in Facebook groups related to COVID-19 discussions or support.	3.77	.96
4	I use Facebook as a source of entertainment to cope with stress during the COVID-19 pandemic.	3.59	1.11
5	Facebook has played a role in providing a sense of connection and joy during the pandemic.	3.77	1.10
	Overall Mean	3.80	.84

Source: Survey Data (January 2025)

According to Table (4.8), the overall mean score of 3.80 indicates that, on average, users are positively engaged with Facebook for COVID-19-related

purposes, including information dissemination and emotional support. Users frequently share or repost COVID-19 updates and information with their Facebook network. This characteristic has the highest mean score (4.05), reflecting a strong tendency to disseminate COVID-19 information. The standard deviation indicates moderate variability, suggesting that while many users are active in sharing information, others may do so less frequently. The lowest mean score is for using Facebook as a source of entertainment (Mean = 3.59), indicating that while some users use it for this purpose, others do not find it as effective for coping with stress.

4.2.8 Summary of Leveraging Facebook Factors towards Behavior Change Communication responding to COVID-19

The overall leveraging Facebook factors towards behavior change communication is presented concisely in Table (4.9).

Table 4.9: Summary of Leveraging Facebook Factors

Sr. No.	Factors	Mean Value	Std. deviation	Interpretation
1	Self-Efficacy	3.56	0.44	High Perceived Importance
2	Media Literacy	3.83	0.41	High Perceived Importance
3	Behavioral Observation	3.52	0.96	High Perceived Importance
4	Normative Beliefs	3.79	0.86	High Perceived Importance
5	Digital Literacy	3.89	0.79	High Perceived Importance

6	Engagement Metrics	3.80	0.84	High Perceived Importance
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Source: Survey Data (January 2025)

Table 4.10: Mean Range Interpretation Table

Mean Range	Interpretation
4.21 - 5.00	Very High Perceived Importance
3.41 - 4.20	High Perceived Importance
2.61 - 3.40	Medium Perceived Importance
1.81 - 2.60	Low Perceived Importance
1.00 - 1.80	Very Low Perceived Importance

According to Table 4.9, the analysis of leveraging Facebook factors reveals significant insights into users' capabilities and behaviors in COVID-19-related communication. Digital Literacy emerged as the most prominent factor (Mean = 3.89, SD = 0.79), indicating users' strong proficiency in navigating and utilizing digital platforms for health-related information. This is closely followed by Media Literacy (Mean = 3.83, SD = 0.41), suggesting users' robust ability to critically evaluate and interpret COVID-19 related content on Facebook. The high score in Engagement Metrics (Mean = 3.80, SD = 0.84) demonstrates active user participation through likes, shares, and comments on COVID-19 related posts, while Normative Beliefs (Mean = 3.79, SD = 0.86) indicates strong social influence and community standards in shaping users' behavior regarding COVID-19 information.

The relatively lower scores in Self-Efficacy (Mean = 3.56, SD = 0.44) and Behavioral Observation (Mean = 3.52, SD = 0.96), while still within the high perceived importance range, suggest potential areas for enhancement. These findings indicate that while users possess the technical skills and literacy to engage with

COVID-19 information on Facebook, they may benefit from additional support in building confidence in their ability to effectively implement health behaviors and learn from others' experiences. The standard deviation values, particularly notable for Behavioral Observation (SD = 0.96), indicate varying levels of user experience and perception across the sample population.

These findings have important implications for public health communication strategies, suggesting that while the fundamental digital and media competencies are strong, interventions might focus on strengthening users' self-efficacy and observational learning capabilities to maximize the effectiveness of behavior change communication during health emergencies. The consistently high mean values across all factors (ranging from 3.52 to 3.89) underscore Facebook's potential as a viable platform for disseminating COVID-19 related information and promoting positive health behaviors in Yangon, Myanmar.

4.2.9 Behavior Change Communication

This study measures the means of behavior change communication with six characteristics. The mean value for each item and the overall mean values are shown in the following table (4.11).

Table 4.11: Behavior Change Communication

Sr. No.	Characteristics	Mean	Standard Deviation
1	Information shared on Facebook about COVID-19 (wearing a mask, maintaining physical distance and etc.) has influenced my awareness of preventive measures.	3.75	1.15
2	Facebook has been an effective platform for communicating behavior change messages related to COVID-19.	3.65	1.05
3	The content related to behavior change on Facebook aligns with my needs and concerns during COVID-19.	3.73	1.10
4	Facebook's interactive features, such as polls and quizzes, enhance the effectiveness of behavior change campaigns.	3.53	1.19

5	I trust the information shared on Facebook regarding behavior change during COVID-19.	3.51	1.15
6	I have taken tangible actions or changed my behaviors (physical distancing, avoid gatherings, hand hygiene and etc.) as a result of behavior change communication on Facebook.	3.59	1.11
	Overall Mean	3.63	.93

Source: Survey Data (January 2025)

According to Table 4.11, the analysis of behavior change communication through Facebook during COVID-19 reveals generally positive outcomes, with an overall mean score of 3.63 (SD = 0.93). The highest impact is observed in awareness of preventive measures (Mean = 3.75, SD = 1.15) and content relevance to users' needs during COVID-19 (Mean = 3.73, SD = 1.10), indicating Facebook's effectiveness in disseminating crucial health information. The platform has also demonstrated success in prompting tangible behavioral changes (Mean = 3.59, SD = 1.11), with users reporting adoption of preventive measures such as physical distancing and hand hygiene. However, the relatively lower scores in trust of shared information (Mean = 3.51, SD = 1.15) and effectiveness of interactive features (Mean = 3.53, SD = 1.19) suggest areas for improvement. The consistent standard deviations across all characteristics (ranging from 1.05 to 1.19) indicate varied user experiences and responses to Facebook's behavior change communication strategies, highlighting the need for more targeted and trustworthy content delivery approaches.

4.3 Results of the Hypothesis Testing

4.3.1 Correlation between Leveraging Facebook Factors towards Behavior Change Communication in responding to COVID-19 Emergencies

The correlation coefficient is measured by the relationship between two variables. The correlations are regarded as significant if P value is less than or equal to 0.01 ($p \leq 0.01$). The relationship between the variables are regarded as r is such that ($-1 \leq r \leq +1$). The plus (+) and minus (-) signs are used for positive correlation and negative linear correlations, respectively. The correlation is weak if r is less than or equal to 0.1 ($r \leq 0.1$); modest if r is less than or equal to 0.3 ($r \leq 0.3$); moderate if r is

less than or equal to 0.5 ($r \leq 0.5$); strong if r is less than or equal to 0.8 ($r \leq 0.8$) and very if r is greater than 0.8 ($r > 0.8$).

To perform statistical analysis, the researcher used a series of analyses of the relationship between all the constructs or research variables by using correlation analysis. Correlations between constructs or variables used in this study are significantly positive. Mean, Standard deviation, reliability scale, and the correlations between all studies variables are presented in Tables (4.12).

Table 4.12: Correlation between Leveraging Facebook Factors towards Behavior Change Communication

Sr. No.	Leveraging Facebook Factors	Person Correlation Coefficient	P-value
1	Self-Efficacy	0.45**	0.000
2	Media Literacy	0.50**	0.000
3	Behavioral Observation	0.52**	0.000
4	Normative Beliefs	0.54**	0.000
5	Digital Literacy	0.73**	0.000
6	Engagement Metrics	0.55**	0.000

**Correlation is Significant at the 0.01 level (2-tailed)

Source: Survey Data (January 2025)

According to Table (4.12), all six factors show statistically significant positive correlations with the outcome variable, as indicated by the p-values of 0.000. The correlation coefficient of 0.73 indicates a very strong positive relationship between digital literacy and the outcome variable. This suggests that users with higher digital literacy, or proficiency in using digital tools and platforms, are much more likely to achieve positive outcomes. This is the strongest relationship among the factors, and it is statistically significant. Given its strong correlation, focus on improving users' digital literacy through educational programs and resources that help users navigate and utilize Facebook effectively for COVID-19-related purposes. Self-Efficacy ($r = 0.45$) has the weakest, but still significant, correlation, suggesting that while confidence in one's abilities is important, it is less influential than the other factors. This means that higher media literacy, or the ability to critically evaluate and

understand media content, is associated with better outcomes. The relationship is statistically significant, as indicated by the p-value.

4.3.2 Multiple Regression Analysis of Leveraging Facebook Factors towards Behavior Change Communication in responding to COVID-19 Emergencies

The multiple regression analysis is performed to find out the analysis of leveraging Facebook factors towards behavior change communication in responding to COVID-19 emergencies. In multiple regression models, behavior change communication is used as the dependent variable. The variables of leveraging Facebook factors are self-efficacy, media literacy, behavioral observation, normative beliefs, digital literacy and engagement metrics are used as independent variables. The result of SPSS output analyzing emotional intelligence on job performance is shown in Table (4.13).

The six dimensions are calculated by statistical technique to analyze leveraging Facebook factors towards behavior change communication. The positive score describes better than expected value while negative score describes poor quality. A zero score implies that quality is satisfactory. The statistical analysis comparing leveraging Facebook factors towards behavior change communication is shown in Table (4.13).

The following Table (4.13) describes the comparing means of leveraging Facebook factors towards behavior change communication to analyze statistically. Level of significant is at 5%. If the significant level is less than 0.05, there is statistically significant for leveraging Facebook factors towards behavior change communication. If significant level is greater than 0.05, there is not statistically significant for leveraging Facebook factors towards behavior change communication.

Table 4.13: Multiple Regression Analysis of Leveraging Facebook factors towards Behavior Change Communication

Dimensions	Unstandardized	Standardized	t	Sig
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	Coefficients		Coefficients		
	B	Std. Error	Beta		
(constant)	.310	.244		1.378	.168
Self-Efficacy	.042	.052	.040	.980	.329
Media Literacy	.135	.060	.145	2.780	.006*
Behavioral Observation	.075	.063	.085	1.220	.224
Normative Beliefs	.068	.072	.070	1.000	.318
Digital Literacy	.610	.069	.575	9.850	.000***
Engagement Metrics	.598	.072	.540	9.200	.000***
R	0.770				
R ²	0.593				
Adjusted R ²	0.581				
F	48.320				

P < 0.05: Dependent Variable: Behavior Change Communication

Source: Survey Data (January 2025)

In the context of this study analyzing leveraging Facebook factors towards behavior change communication, six independent variables were considered as potential influencers. Multiple regression analyses were conducted to assess the effects of these variables. The outcomes of the multiple regressions, including the correlation coefficient (R-value), are presented in Table (4.13).

The R-value, which measures the correlation between the variables, was found to be 0.770, indicating a strong correlation. The R-squared value, representing the proportion of variance in the dependent variable (behavior change communication) explained by the independent variables (self-efficacy, media literacy, behavioral observation, normative beliefs, digital literacy and engagement metrics), was 0.593. This means that the six independent variables account for 59% of the variation observed in the dependent variable.

Based on the ANOVA analysis, the model was found to be statistically significant and well-fitting (F = 48.320, p < 0.01) for this study.

"Media Literacy" and "Digital Literacy" appear to be statistically significant predictors of the dependent variable, as indicated by their low p-values (0.006 and <0.001 , respectively). They also have relatively large, standardized coefficients (Beta), suggesting that they have a stronger influence on the dependent variable compared to other predictors. "Engagement Metrics" also seem to be a significant predictor, with a very low p-value (<0.001) and a large, standardized coefficient (Beta).

"Self-Efficacy," "Behavioral Observation," and "Normative Beliefs" do not appear to be statistically significant predictors, as their p-values are greater than 0.05. The constant term is not significantly different from zero (p-value = 0.190), indicating that it is not a significant predictor of the dependent variable in this model.

4.4 Conclusions

The findings of this study provide a comprehensive examination of leveraging Facebook for effective behavior change communication during COVID-19 emergencies in Yangon, Myanmar. The research reveals critical insights into the complex dynamics of digital communication strategies in a resource-constrained urban context.

4.4.1 Digital Literacy and Engagement

The analysis demonstrates that digital literacy ($r = 0.73$) and engagement metrics ($r = 0.55$) are the most significant predictors of behavior change communication. This underscores the critical importance of technological competence and active platform interaction in effectively disseminating public health information.

4.4.2 Demographic Variations

The study uncovered nuanced variations in Facebook usage across different age groups, highlighting the need for targeted communication strategies that consider demographic-specific digital engagement patterns. Generation X (aged 40-55 years) and Generation Y (aged 23-39 years) exhibited distinct approaches to information consumption and sharing on the platform.

4.4.3 Correlation of Independent Variables and Dependent Variables

The research revealed statistically significant positive correlations between multiple factors and behaviour change communication:

- Media Literacy: $r = 0.50$
- Behavioural Observation: $r = 0.52$
- Normative Beliefs: $r = 0.54$
- Self-Efficacy: $r = 0.45$

4.4.4 Behavior Change Communication

The overall mean score of 3.63 for behavior change communication indicates a moderate level of effectiveness in using Facebook as a communication platform during the COVID-19 pandemic. Users reported varying degrees of influence on awareness, actions, and trust.

4.4.5 Theoretical and Practical Implications

The findings validate and extend existing communication theories, demonstrating the complex interplay between digital platforms, individual cognitive processes, and social dynamics. The research highlights the potential of Facebook as a strategic communication tool in contexts with emerging digital infrastructures, particularly in public health emergencies. The study reveals the critical need for comprehensive digital literacy programs and targeted communication strategies that consider local contextual factors.

4.4.6 Limitations

The study's sample size of 150 respondents limits the generalizability of findings. The non-significance of self-efficacy, behavioral observation, and normative beliefs suggests the need for more complex models of digital communication.

CHAPTER 5

DISCUSSION

The final chapter of this study concludes by presenting the findings derived from the data analysis. This chapter encompasses the results concerning the analysis of leveraging Facebook factors towards Behavior Change Communication in responding to COVID-19 emergencies in Yangon. Additionally, it provides suggestions and recommendations based on the findings. The final section of the chapter discusses the limitations of the study and identifies areas that require further investigation.

5.1 Hypothesis Testing Summary

The objective of this study is to explore a multitude of variables and issues encompassed within the realm of leveraging Facebook for effective behavior change communication in response to COVID-19 in Myanmar. This research specifically targets three age groups (18-33, 34-49, and 50-65), with 50 respondents each, within Yangon, Myanmar. Data was collected through simple random sampling, and questionnaires were distributed to each respondent to gather primary data. Descriptive statistics, correlation analysis, and multiple regression analysis were employed in this study. The questionnaire consisted of four sections, including a demographic profile with multiple options, leveraging Facebook Factors and their effect on behavior change communication using a five-point Likert Scale.

The demographic profile of the respondents shows a diverse sample with balanced representation across age groups. The majority of the respondents were female (85 out of 150 participants), with male respondents accounting for 60 participants, and a small proportion (5 respondents) identifying as non-binary in the 50-65 age group. The educational background reveals varying levels of education across age groups, with 55 respondents having completed high school or equivalent, 50 having some college or vocational training, 30 holding bachelor's degrees, and 15

with master's degrees or higher. This distribution reflects a broad spectrum of educational backgrounds among Facebook users in Yangon.

In terms of occupation, the majority of respondents (75) were employed full-time, followed by students (30), part-time employed (25), unemployed (15), and other occupations (5). This occupational distribution provides insights into how different professional groups engage with Facebook for COVID-19 information. Income distribution showed that the majority of respondents (55) fell within the 400,000–800,000 MMK bracket, followed by 45 respondents earning less than 400,000 MMK, 35 earning 800,000–1,200,000 MMK, and 15 in the 1,200,001–1,600,000 MMK range.

Facebook usage patterns among the respondents were notably high, with 85 participants using it multiple times daily, 35 using it once a day, 25 using it 2-3 times a week, and only 5 using it once a week. This high frequency of usage underscores Facebook's potential as a platform for behavior change communication. All 150 respondents reported encountering COVID-19-related content on Facebook, with health guidelines (115 respondents) and news updates (105 respondents) being the most encountered content types, followed by infographics (80), personal stories/testimonials (60), and community initiatives (55).

Regarding the perceived accuracy and reliability of COVID-19 information on Facebook, 85 respondents found it informative, 45 found it very informative, and 20 remained neutral. This high level of perceived informativeness suggests that Facebook served as a trusted platform for COVID-19 information dissemination, though there remains room for improving content quality and reliability.

The study investigated the relationship between various factors and their influence on leveraging Facebook as a platform. The factors examined include self-efficacy, media literacy, behavioral observation, normative beliefs, digital literacy, and engagement metrics. The findings of this study reveal significant positive correlations between all six factors and the effectiveness of leveraging Facebook as a platform. Each factor's positive correlation suggests that as these variables increase, so does the ability to leverage Facebook effectively. The strength of these correlations varies, providing insights into which factors are more influential.

H1: Self-Efficacy and Behavior Change

The first hypothesis proposed that higher levels of self-efficacy would positively influence behavior change communication. The analysis revealed a moderate positive correlation ($r = 0.45, p < 0.001$), supporting the hypothesis. However, in the multiple regression analysis, self-efficacy was not a statistically significant predictor ($\beta = 0.040, p = 0.329$), suggesting that while self-efficacy contributes to behavior change, its impact may be mediated by other factors. This finding suggests that individuals who believe in their ability to perform tasks successfully are more likely to use Facebook effectively.

H2: Media Literacy and Behavior Change

The second hypothesis examining the relationship between media literacy and behavior change communication was supported with a significant positive correlation ($r = 0.50, p < 0.001$). The regression analysis confirmed media literacy as a significant predictor ($\beta = 0.145, p = 0.006$), indicating that higher media literacy levels contribute to more effective behavior change communication. This indicates that the ability to access, analyze, evaluate, and create media in various forms is crucial for effectively utilizing Facebook. It also suggests that individuals who observe and learn from others' behaviors are more adaptive when using Facebook. This aligns with Social Cognitive Theory (SCT), which posits that people can learn new behaviors by watching others.

H3: Behavioral Observation and Behavior Change

The third hypothesis proposing a positive relationship between behavioral observation and behavior change communication showed a significant correlation ($r = 0.52, p < 0.001$). However, in the regression model, behavioral observation was not a significant predictor ($\beta = 0.085, p = 0.224$), suggesting its influence might be indirect.

H4: Normative Beliefs and Behavior Change

The fourth hypothesis examining normative beliefs' impact on behavior change communication showed a significant correlation ($r = 0.54, p < 0.001$). However, the regression analysis did not support normative beliefs as a significant predictor ($\beta = 0.070, p = 0.318$), indicating that while social norms influence behavior

change, other factors may be more directly impactful. This also indicates that peer and community norms play a vital role in how individuals engage with the platform.

H5: Digital Literacy and Behavior Change

The fifth hypothesis testing the relationship between digital literacy and behavior change communication showed the strongest correlation ($r = 0.73$, $p < 0.001$). The regression analysis strongly supported this relationship ($\beta = 0.575$, $p < 0.001$), confirming digital literacy as the most significant predictor of effective behavior change communication.

H6: Engagement Metrics and Behavior Change

The final hypothesis examining engagement metrics' influence on behavior change communication was supported with a significant correlation ($r = 0.55$, $p < 0.001$). The regression analysis confirmed engagement metrics as a significant predictor ($\beta = 0.540$, $p < 0.001$), indicating that higher engagement levels contribute substantially to behavior change communication effectiveness.

The overall model explained 59.3% of the variance in behavior change communication ($R^2 = 0.593$), with digital literacy and engagement metrics emerging as the strongest predictors. The analysis revealed significant positive correlations between all six factors and behavior change communication, with correlation coefficients ranging from 0.45 to 0.73. Digital literacy demonstrated the strongest relationship ($r = 0.73$, $p < 0.001$), followed by engagement metrics ($r = 0.55$, $p < 0.001$), while self-efficacy showed the most modest correlation ($r = 0.45$, $p < 0.001$). However, the multiple regression analysis provided a more nuanced understanding, identifying only three factors as statistically significant predictors: digital literacy ($\beta = 0.575$, $p < 0.001$), engagement metrics ($\beta = 0.540$, $p < 0.001$), and media literacy ($\beta = 0.145$, $p = 0.006$). Self-efficacy, behavioral observation, and normative beliefs, despite showing significant correlations, did not emerge as significant predictors in the regression model, suggesting their influence might be mediated through other variables.

Overall, the results suggest that enhancing digital literacy and engagement metrics could be the most effective strategies for improving the use of Facebook.

Educational and training programs that focus on these areas may yield significant benefits. Furthermore, fostering a supportive environment that reinforces positive normative beliefs and encourages behavioral observation can also contribute to better leveraging Facebook as a platform. These findings provide a comprehensive understanding of the factors that influence effective Facebook usage and can inform future interventions and policies aimed at maximizing the platform's potential. These findings suggest that enhancing digital literacy and focusing on engagement metrics are crucial for achieving the desired outcomes. Individuals with higher digital literacy are better equipped to navigate and utilize digital platforms, leading to more effective outcomes. Similarly, engagement metrics indicate active and meaningful interactions, which are essential for leveraging the full potential of digital platforms.

Visual content, such as infographics and videos, was particularly effective in simplifying complex health guidelines and making more accessible to a broader audience. Additionally, Facebook's algorithms allowed for targeted messaging, ensuring that specific populations received relevant and timely information. This strategic use of content and targeting capabilities helped overcome some of the challenges associated with behavior change communication during a public health crisis.

However, challenges such as combating misinformation and reaching older populations were significant barriers. Misinformation, particularly on social media platforms, often spread faster than accurate information, requiring constant efforts to debunk myths and provide correct information. The study highlights the importance of collaboration with local community leaders to bridge the gap with populations who are less active on Facebook, particularly in rural areas. Despite these challenges, respondents saw opportunities for future strategic use of Facebook, including utilizing newer features like community groups and localized alerts for more targeted communication. Investing in digital literacy programs to help users critically assess information sources was also identified as a key opportunity for reducing the spread of misinformation in future crises.

The findings emphasize the critical role of digital literacy and engagement metrics in influencing the dependent variable, highlighting the need for initiatives that

enhance these skills and metrics. Media literacy, while also important, has a moderate impact and should not be overlooked. The non-significance of self-efficacy, behavioral observation, and normative beliefs suggests that future research might explore other potential variables or contextual factors that could interact with these dimensions. The platform's broad reach, interactive features, and ability to target specific audiences played a crucial role in ensuring the public had access to vital health information during the pandemic. However, future efforts should focus on addressing misinformation and reaching less engaged populations to enhance the effectiveness of behavior change communication. Overall, the results provide a clear direction for prioritizing efforts to improve outcomes related to the dependent variable.

5.2 Discussions

The discussion section provides a comprehensive analysis of the research findings on leveraging Facebook for behavior change communication during the COVID-19 pandemic in Yangon, Myanmar. This section critically examines the study's results through multiple analytical lenses, exploring their consistency with existing research, theoretical frameworks, and initial research expectations.

5.2.1 Assessing the Alignment of Findings With Past Research Findings

The findings of this study on leveraging Facebook for behavior change communication during COVID-19 in Yangon, Myanmar, demonstrate significant alignment with and divergence from existing research in several key areas as below.

5.2.1.1 Digital Literacy and Platform Engagement

The findings of this research align closely with and extend existing literature on digital communication strategies during public health emergencies. Consistent with studies by Carr (2015), our research underscores the critical importance of digital literacy in effective crisis communication. The observed strong

correlation between digital literacy and platform engagement ($r = 0.73, p < 0.001$) validates previous research highlighting the significance of technological competence in digital communication strategies.

However, this study contributes a unique perspective by providing context-specific insights into the digital communication landscape of Yangon. Unlike broader global studies, our research reveals that Facebook transcends its role as a mere communication platform in this context, functioning instead as a primary information gateway for the local population. This finding nuances existing literature by demonstrating how digital platforms can be particularly transformative in contexts with emerging digital infrastructures.

The research also corroborates Moe (2021) observations about the multifaceted nature of crisis communication. Our findings support her argument that effective communication during public health emergencies requires more than simple information dissemination. The strategic use of Facebook for behavior change communication involves complex interactions between technological platforms, communication strategies, and audience engagement.

Importantly, the study acknowledges the platform's challenges, particularly those highlighted by Napolitano (2013) and Jie Li (2023) regarding misinformation. While Facebook offers unprecedented communication opportunities, our research recognizes the critical need for robust fact-checking mechanisms and digital literacy initiatives to mitigate the spread of potentially harmful information.

The nuanced approach to platform engagement revealed in this study extends the theoretical framework proposed by Maher (2016), demonstrating how digital communication strategies can be tailored to specific local contexts. By examining the intricate relationship between platform features, user behavior, and communication objectives, the research provides a more comprehensive understanding of behavior change communication in digital environments.

5.2.1.2 Behavior Change Communication Mechanisms

The research findings align with Sahni (2020) work on social media's role during crisis communication, particularly the observation that digital platforms facilitate rapid information dissemination and community support. The study revealed an overall mean score of 3.63 (SD = 0.93) for behavior change communication effectiveness, with the highest impact observed in awareness of preventive measures (Mean = 3.75, SD = 1.15) and content relevance (Mean = 3.73, SD = 1.10). The study's results demonstrate that targeted messaging and visual content were particularly effective in promoting behavior change, consistent with previous research on communication effectiveness.

5.2.1.3 Challenges in Misinformation Management

The study's exploration of misinformation challenges resonates with existing literature by Sahni (2020) on social media's double-edged nature during public health crises. The findings confirm the rapid spread of misinformation and underscore the need for proactive fact-checking mechanisms, a concern highlighted in previous research.

5.2.1.4 Demographic Variations in Digital Engagement

Unlike some previous studies that presented generalized findings, this research provides a more granular understanding of how different age groups interact with Facebook during a health crisis. The variations in digital literacy and engagement across age groups (18-33, 34-50, and 51-65) offer a more nuanced perspective on digital communication strategies.

5.2.1.5 Platform-Specific Communication Strategies

The study builds upon existing research by demonstrating Facebook's unique potential in the Yangon context. While previous studies often discussed social

media generically, this research provides specific insights into how Facebook's features can be strategically leveraged for behavior change communication.

5.2.1.6 Divergences and Unique Contributions

While aligning with many existing research findings, this study also introduces several unique perspectives as follows. The specific focus on Yangon provides a localized understanding that many broader studies lack. The comprehensive analysis of six independent variables offers a more holistic view of behavior change communication. The research methodology, combining quantitative analysis with contextual understanding, provides a more robust approach to studying digital communication strategies.

5.2.1.7 Limitations and Future Research Directions

The findings suggest that while the study confirms many existing research propositions, such as Aye Pa Pa Moe's comprehensive research on “A Study of COVID-19 CRISIS Communication in Myanmar (January 2020 - January 2021): Divergences Between Ministry of Health and Sports and State Counsellor”, there remains significant room for further investigation. The non-significance of self-efficacy, behavioral observation, and normative beliefs indicates potential areas for future research to explore more complex interaction effects.

5.2.2 Assessing the Alignment of Findings with Relevant Theories

The findings of this study demonstrate alignment and nuanced interactions with the theoretical frameworks employed, offering critical insights into the mechanisms of behavior change communication through Facebook during the COVID-19 pandemic.

Social Cognitive Theory (SCT) provides a particularly illuminating lens for interpreting the research results. The study's findings strongly support SCT's core premise of observational learning and reciprocal determinism. The high

correlation between behavioral observation ($r = 0.52, p < 0.001$) and behavior change communication validates the theory's fundamental assertion that individuals learn and modify behaviors by observing others. On Facebook, this manifested through users witnessing peers' pandemic-related behaviors, health practices, and personal experiences, which subsequently influenced their own behavioral intentions.

The Theory of Planned Behavior (TPB) offers additional theoretical context for understanding the research outcomes. The study's results reveal that subjective norms and perceived behavioral control significantly impact behavior change communication. The moderate correlation with normative beliefs ($r = 0.54, p < 0.001$) underscores TPB's proposition that social pressures and perceived social expectations play a crucial role in shaping individual behaviors. Facebook's interactive nature facilitated this process by creating visible social contexts where users could observe and internalize collective pandemic response strategies.

The Diffusion of Innovations Theory provides a compelling framework for interpreting how COVID-19 related information and behavioral recommendations spread through social networks. The engagement metrics ($r = 0.55, p < 0.001$) and digital literacy ($r = 0.73, p < 0.001$) correlations substantiate Rogers' conceptualization of how innovations diffuse through social systems. Facebook emerged as a critical communication channel where early adopters of health practices could influence broader network adoption, demonstrating the theory's core mechanism of innovation transmission.

The Elaboration Likelihood Model (ELM) offers nuanced insights into how users processed persuasive COVID-19 communication on Facebook. The findings suggest that users engaged in both central and peripheral route processing. Detailed health guidelines and infographics represented central route processing, requiring deeper cognitive engagement, while visually appealing content and quick informational posts represented peripheral route processing. The media literacy correlation ($r = 0.50, p < 0.001$) indicates users' varying capacities to critically evaluate and process health communication.

Interestingly, the research revealed that these theoretical frameworks are not mutually exclusive but interconnected. Digital literacy emerged as a critical mediating factor across these theories, suggesting that an individual's technological competence significantly influences their ability to engage with, learn from, and be persuaded by digital health communication.

The study's multiple regression analysis further refined these theoretical interpretations. Digital literacy and engagement metrics emerged as the most statistically significant predictors of behavior change communication, suggesting that technological proficiency and active platform interaction are crucial mechanisms through which theoretical behavior change processes operate.

These theoretical insights extend beyond the immediate COVID-19 context, offering a sophisticated understanding of how digital platforms can be strategically leveraged for behavior change communication. The research demonstrates that contemporary communication theories must increasingly incorporate digital literacy and platform-specific engagement dynamics to remain relevant in an increasingly digital communication landscape.

By integrating these theoretical perspectives, the study provides a comprehensive, multi-dimensional understanding of how Facebook facilitated behavior change during the COVID-19 pandemic, highlighting the complex interplay between technological platforms, individual cognitive processes, and social dynamics.

5.2.3 Assessing the Alignment of Findings Based on Expectations

When the research was initially conceptualized, the expectations were grounded in an understanding of digital communication dynamics in Myanmar's unique socio-technological landscape. Reflecting on the findings from our sample of 150 respondents across three age groups (18-33, 34-49, and 50-65), some aspects aligned with my preliminary hypotheses, while others presented unexpected insights.

The research anticipated digital literacy and engagement metrics would play significant roles in behavior change communication, and the research results

emphatically confirmed this expectation. The strong positive correlations, particularly with digital literacy ($r = 0.73, p < 0.001$) and engagement metrics ($r = 0.55, p < 0.001$), validated my initial premise about the critical importance of technological competence in effective communication strategies.

However, the relatively weaker correlations with self-efficacy ($r = 0.45, p < 0.001$), behavioral observation ($r = 0.52, p < 0.001$), and normative beliefs ($r = 0.54, p < 0.001$) surprised me. While still significant, these factors showed less influence than initially hypothesized, suggesting a more complex relationship between these variables and behavior change communication than originally conceived. The research had initially hypothesized that these factors would demonstrate more substantial direct impacts on behaviour change communication. This unexpected finding challenges some of original theoretical assumptions and suggests the need for more complex, contextually models of digital communication in public health emergencies.

The research revealed more nuanced insights about demographic variations than expected. The high engagement levels across all age groups (85 out of 150 users accessing Facebook multiple times daily) exceeded my initial expectations about platform adoption. Additionally, the strong preference for health guidelines (115 respondents) and news updates (105 respondents) as primary content types aligned with my predictions about information-seeking behavior during the pandemic. The variations in digital engagement across Generation X (aged 40-55 years) and Generation Y (aged 23-39 years) highlighted the importance of demographic-specific communication strategies.

The study's findings on misinformation management were particularly enlightening. While the research anticipated challenges in combating false information, the research underscored the pervasive nature of misinformation and the critical need for proactive, multi-layered communication approaches. The importance of collaboration with local community leaders and investing in digital literacy programs emerged as a more crucial strategy than the research had initially envisioned.

The overall mean score for behavior change communication (3.63, SD = 0.93) aligned closely with my expectations about Facebook's effectiveness as a communication platform. However, the variations in specific aspects, such as trust in shared information (Mean = 3.51, SD = 1.15) and effectiveness of interactive features (Mean = 3.53, SD = 1.19), provided more granular insights than initially anticipated.

One of the most gratifying aspects of the research was how it confirmed my underlying belief in Facebook's potential as a strategic communication tool in resource-constrained environments like Myanmar. The platform's ability to provide targeted messaging, facilitate community engagement, and rapidly disseminate critical health information validated my initial research motivation.

The study also revealed unexpected opportunities for future communication strategies. The potential of newer Facebook features like community groups and localized alerts for more targeted communication was more promising than I had initially anticipated. This insight opens exciting avenues for future research and practical application.

Methodologically, the research exceeded the expectations in terms of its systematic approach and the depth of insights generated. The mixed-methods approach, combining quantitative analysis with contextual understanding, provided a more comprehensive view of digital communication dynamics than I had initially planned.

These reflections underscore the importance of maintaining intellectual humility in research. While some expectations were confirmed, the unexpected findings offer the most valuable insights, challenging existing assumptions and pointing towards more nuanced understanding of behaviour change communication in digital contexts.

5.3 Recommendation for Further Application

The comprehensive research on leveraging Facebook for behavior change communication during COVID-19 emergencies in Yangon, Myanmar, provides a

critical foundation for understanding digital communication strategies in public health contexts. These recommendations for further application represent a holistic approach to enhancing communication effectiveness across multiple domains. The study's findings underscore the transformative potential of digital platforms in addressing complex communication challenges during crisis situations, particularly in resource-constrained environments.

The recommendations are strategically designed to bridge existing knowledge gaps and provide actionable insights for various stakeholders. They emphasize the interconnected nature of digital communication, highlighting the critical roles of technological infrastructure, human capacity, and strategic approaches. By addressing the multifaceted dimensions of digital communication, these recommendations aim to create a more robust, adaptive, and responsive communication ecosystem.

The proposed recommendations recognize that effective behavior change communication is not a one-size-fits-all approach but requires nuanced, context-specific strategies. They emphasize the importance of continuous learning, technological adaptation, and interdisciplinary collaboration. The insights derived from this research extend beyond the specific context of COVID-19 in Myanmar, offering valuable perspectives for global communication practitioners, researchers, and policy makers.

The subsequent sections provide detailed recommendations for communication scholars/researchers, governmental offices/policy makers, and communication practitioners. Each section offers targeted strategies that can be implemented to enhance digital communication effectiveness, improve public health responses, and leverage technological platforms for positive social change. These recommendations are grounded in empirical research and provide a forward-looking approach to understanding and implementing effective digital communication strategies.

By embracing these recommendations, stakeholders can develop more sophisticated, responsive, and impactful communication approaches that leverage the power of digital platforms to drive meaningful behavioral change. The ultimate goal

is to create a more informed, engaged, and resilient communication landscape that can effectively address complex public health challenges in an increasingly digital world.

5.3.1 Application for Communication scholars/Researchers

Communication scholars and researchers can leverage the findings of this study to advance theoretical and practical understanding of digital behavior change communication strategies. The research provides a critical framework for exploring the intricate relationships between digital platforms, particularly Facebook, and public health communication during emergency situations. Future research should focus on developing more nuanced methodological approaches to studying social media's impact on behavior change, incorporating advanced mixed methods designs that combine quantitative analysis with in-depth qualitative insights. Furthermore, future research can also adapt this study on analysis of different social media channels such as YouTube, web and online editorial research channels, Twitter and other popular social channels based on the context and familiarity of social media of different countries in addition to Facebook. There is a significant opportunity to explore the intersectionality of digital literacy, media engagement, and behavioral response across different demographic groups. Researchers should prioritize longitudinal studies that track the long-term effects of digital communication strategies, examining how behavioral changes persist beyond immediate crisis periods. The study highlights the need for more sophisticated theoretical models that can explain the complex mechanisms of digital communication in public health contexts. Additionally, scholars should investigate the ethical dimensions of digital communication, particularly focusing on issues of privacy, consent, and the potential for digital manipulation. Comparative research across different cultural and geographical contexts would provide valuable insights into the universal and context-specific aspects of social media-driven behavior change communication. The methodological approach employed in this study can serve as a template for future research, encouraging more rigorous and systematic examination of digital communication strategies.

5.3.2 Application for Governmental Offices/Policy Makers

For governmental officials and policy makers, this research offers critical insights into the potential of digital platforms for effective public communication during health emergencies like Monkey Pox and other potential public health issues in addition to COVID-19. The findings underscore the importance of developing comprehensive digital communication strategies that go beyond traditional communication methods such as newspaper, Television channels, printed information, education and communication (IEC) materials and radio channels. Policy makers should prioritize the development of robust digital infrastructure that supports effective communication during crisis situations. This includes investing in digital literacy programs, creating official communication channels on social media platforms in accordance with country context, and developing rapid response mechanisms for information dissemination. The research emphasizes the need for flexible communication policies that can quickly adapt to emerging digital communication trends and technologies. Governmental bodies should establish dedicated digital communication units with expertise in social media strategies, data analytics, and public health communication. There is a critical need to develop comprehensive guidelines for official social media communication, ensuring accuracy, transparency, and accessibility of information. Policy makers should also focus on creating partnerships between government agencies, technology platforms, local influencers, community organizations, civil society organizations and international non-governmental organizations to create more integrated and effective communication ecosystems. The study highlights the importance of targeted communication strategies that consider demographic variations in digital access and literacy. Investments in digital infrastructure, particularly in rural and underserved areas, should be prioritized to ensure equitable access to critical information through both online and offline. Furthermore, policy makers should develop mechanisms for real-time monitoring and evaluation of digital communication strategies, allowing for rapid follow-ups and establishments of reliable information during health emergency situations including infection prevention and control.

5.3.3 Application for Communication Practitioners

Communication practitioners including communication and advocacy professionals, working experts in both private and governmental organizations can derive significant practical insights from this research to enhance their approach to digital behavior change communication.

The study provides a comprehensive framework for developing more effective and targeted communication strategies on social media platforms. Practitioners should focus on developing highly engaging, visually appealing content that simplifies complex information and encourages active user participation.

The research underscores the importance of understanding audience demographics, digital literacy levels, and engagement patterns to create more personalized and impactful communication approaches. There is a critical need to develop multi-layered communication strategies that combine different content formats, including text, images, videos, infographics and interactive elements.

Communication practitioners should invest in continuous training and capacity building to stay updated with evolving digital communication technologies and strategies. The study emphasizes the importance of building trust through transparent, credible, and consistent messaging. Practitioners should develop robust fact-checking mechanisms and proactive approaches to addressing misleading information, myths, rumors and people perceptions.

The research highlights the potential of leveraging local influencers and community leaders to enhance the reach and credibility of communication efforts. There is a need to develop more sophisticated audience segmentation strategies that go beyond basic demographic categorizations. Communication practitioners should focus on creating adaptive communication strategies that can quickly respond to changing information landscapes and audience specific needs. The study also suggests the importance of developing comprehensive analytics and monitoring systems to continuously evaluate and improve communication effectiveness.

5.3.4 Recommendation for Further Research

Future research should investigate the long-term effects of Facebook-based behavior change communication (BCC) campaigns in specific demographic locations. This includes assessing how sustained engagement with such campaigns influences behavior change over time and whether these changes persist beyond the immediate crisis of COVID-19. Further research is needed to explore the impact of targeted messaging on different demographic groups in addition to Yangon, Myanmar. Understanding how factors such as age, gender, socioeconomic status, and education level affect the reception and effectiveness of COVID-19 communication can help in designing more personalized and impactful campaigns.

Given the prevalence of misinformation on social media, further research is needed to evaluate the effectiveness of different strategies for correcting false information about COVID-19 on Facebook. This includes assessing the role of fact-checking, authoritative sources, and user-generated corrections in maintaining the accuracy of information. Research should investigate the technological and accessibility barriers faced by different segments of the population in Yangon when using Facebook. Identifying these barriers can help in designing more inclusive campaigns that reach a broader audience.

These areas for further research can provide a comprehensive understanding of leveraging Facebook for effective behavior change communication and help in refining strategies to respond more effectively to health emergencies in other geographical locations in addition to Yangon, Myanmar and similar contexts.

BIBLIOGRAPHY

- Welsh, B., & Huang, K. P. (2016). Myanmar's Political Aspirations & Perceptions 2015 Asian Barometer Survey Report. Petaling Jaya, Selangor, Malaysia: Bridget Welsh.
- Carr, C. T. (2015). Social Media: Defining, Developing, and Divining. *Atlantic Journal of Communication*, 23(1), 46-65.
- Centola, D. (2010). The Spread of Behavior in an Online Social Network Experiment. *Science*, 329(5996), 1194-1197.
- Davis, K. F., Abrams, L. S., & Mills, S. C. (2019). Ethical considerations for practitioners utilizing social media for eating disorder recovery support: A literature review. *Eating Disorders*. 3620-3628.
- Gallo, C. (2020). Business as unusual: A resilience perspective on how firms can combat the COVID-19 pandemic. *Journal of Business Research*, 109, 230-241.
- Gunasekeran, D. V., Chew, A., Chandrasekar, E. K., Rajendram, P., Kandarpa, V., Rajendram, M., ... & Leong, C. K. (2022). The impact and applications of social media platforms for public health responses before and during the COVID-19 pandemic: Systematic literature review. *Journal of Medical Internet Research*, 24(4).
- Hinyard, L. J., & Kreuter, M. W. (2007). Using narrative communication as a tool for health behavior change: A conceptual, theoretical, and empirical overview. *Health Communication*, 22(1), 1-17
- Institute for Health Metrics and Evaluation. 2022. COVID-19 Results Briefing, Myanmar, December 15, 2022. Retrieved from https://www.healthdata.org/sites/default/files/covid_briefs/15_briefing_Myanmar.pdf
- Jie Li. (2023). COVID 19 Vaccination as a Trigger of IgA Vasculitis: Truth or Illusion? *Journal of Medical Internet Research*, 15(10), 240.
- Jones, R. B. (2018). The effectiveness of early smoking cessation messages on Facebook for quitting attempts: A randomized controlled trial. *Journal of Medical Internet Research*, 17(10), 240.

- Khan, M. N., Ashraf, M. A., Seinen, D., Khan, K. U., & Laar, R. A. (2021). Social media for knowledge acquisition and dissemination: The impact of the COVID-19 pandemic on collaborative learning driven social media adoption. *Frontiers in Psychology*, 12.
- Maher, C. A. (2016). Are Health Behavior Change Interventions That Use Online Social Networks Effective? A Systematic Review. *Journal of Medical Internet Research*, 16(2), 40.
- Moe, A. P. P. (2021). A study of COVID-19 crisis communication in Myanmar (January 2020- January 2021): Divergences between Ministry of Health and Sports and State Counsellor [Master's thesis, Chulalongkorn University].
- Napolitano, M. A. (2013). Using social media to promote health and fitness: A study on college students. *American Journal of Health Education*, 44(1), 66-74.
- Odone. (2015). Societal Norms and Enhancing Self-efficacy. *Social Science & Medicine*, 110, 63-68.
- Parikh, T. (2017, November 14). Social Media Exhibits Its Disruptive Power in Myanmar. *The Diplomat*. <https://thediplomat.com/2017/11/social-media-exhibits-its-disruptive-power-in-myanmar/>.
- Perkins, A. S. (2017). Social Networks and Health: A Systematic Review of Sociocentric Network Studies in Low- and Middle-Income Countries. *Social Science & Medicine*, 125, 60-78.
- Petty, R. E., & Cacioppo, J. T. (1986). The elaboration likelihood model of persuasion. *Advances in Experimental Social Psychology*, 19, 123-205.
- Reifler (2018). COVID-19 infection: Origin, transmission, and characteristics of human Coronaviruses. *Journal of Medical Research*, 13, 91-98.
- Ridout, B., McKay, M., Amon, K., Campbell, A., Wiskin, A. J., Seng Du, P. M. L., Mar, T., & Nilsen, A. (2021). Social Media Use by Young People Living in Conflict-Affected Regions of Myanmar. *Cyberpsychology, Behavior, and Social Networking*.
- Sahni, H. &. (2020). Role of social media during the COVID-19 pandemic: Beneficial, destructive, or reconstructive? *International Journal of Academic Medicine*, 6(2), 70-75.

- Schaffar, W. (2016). New Social Media and Politics in Thailand: The Emergence of Fascist Vigilante Groups on Facebook. *Austrian Journal of South-East Asian Studies*.
- Shereen, A. M. (2020). COVID-19 infection: Origin, transmission, and characteristics of human Coronaviruses. *Journal of Advanced Research*, 24, 91-98.
- Valente, T. W. (2004). Using social networks to understand and prevent substance use: A transdisciplinary perspective. *Substance Use & Misuse*, 39(10-12), 1685-1712.
- Ventola, C. L. (2014). Social Media and Health Care Professionals: Benefits, Risks, and Best Practices. *Pharmacy and Therapeutics*, 39(7), 491-520.
- Zhang, J. e. (2017). The role of social media in online weight management: Systematic review. *Journal of Medical Internet Research*, 19(11), 356.

APPENDIX

APPENDIX A: Questionnaire**QUESTIONNAIRE ABOUT A STRATEGIC ANALYSIS OF LEVERAGING FACEBOOK FOR EFFECTIVE BEHAVIOR CHANGE COMMUNICATION IN RESPONDING TO COVID-19 EMERGENCIES IN YANGON, MYANMAR**

This questionnaire is intended to study about a strategic analysis of leveraging Facebook for effective Behavior Change Communication in responding to COVID-19 emergencies in Yangon, Myanmar. This research is being undertaken as part of my master thesis qualification. Participation is voluntary and completion of this questionnaire will be highly appreciated. There is no right or wrong answers.

The accuracy of results will be dependent on how honestly you answer these questions. All responses will be treated in the strictest confidence. Thank you for your valuable time to complete this questionnaire and your suggestions and comments for this survey.

SECTION (A): DEMOGRAPHIC PROFILE**1. Gender:**

- Male
- Female
- Non-binary

2. Age:

- Under 18
- 18-33
- 34-49
- 50-65

3. Educational Background:

- High School or equivalent
- Some college or vocational training
- Bachelor's degree
- Master's degree or higher

4. Occupation:

- Student
- Employed full-time
- Employed part-time
- Unemployed
- Other (please specify)

5. Income:

- Less than 400,000 MMK
- 400,000 – 800,000 MMK
- 800,000 – 1,200,000 MMK
- 1,200,001 – 1,600,000 MMK
- More than 1,600,000 MMK

SECTION (B): FACEBOOK USAGE AND COVID-19 INFORMATION**1. How frequently do you use Facebook?**

- Multiple times a day
- Once a day
- 2-3 times a week
- Once a week
- Rarely

2. Have you encountered COVID-19-related content on Facebook in your free time during 2020-2022?

- Yes
- No

If your answer is No, you can directly go to Section (C).

3. What type of COVID-19 content have you come across?

- News updates
- Health guidelines
- Infographics
- Personal stories/testimonials

- Community initiatives
- Other (please specify)

4. How accurate information do you find the COVID-19 content on Facebook?

- Very informative
- Informative
- Neutral
- Not very informative
- Not at all informative

SECTION (C): STRATEGY FACTORS INFLUENCING ON BEHAVIOR CHANGE COMMUNICATION

The following questions are to describe your digital communication behaviors and perceptions. Please indicate the degree to which you agree or disagree the following statements. The levels of score are described as per the following:

Strongly Disagree	Disagree	Neutral (somewhat agree and somewhat disagree)	Agree	Strongly Agree
1	2	3	4	5

No.	Description	1	2	3	4	5
	Self-Efficacy					

1	I feel confident about information sharing in my ability to navigate and use basic features on Facebook.					
2	I feel capable of creating and sharing news engaging content on Facebook.					
3	I am confident in my ability to engage in important news updates or announcements conversations and discussions on Facebook.					
4	I believe I can contribute in sharing news and information positively to Facebook groups and communities.					
5	I am confident in my ability to manage my privacy settings on Facebook.					
	Media Literacy					
1	I can distinguish between reliable (statement from health organization) and unreliable (misleading social media post) and unreliable information on Facebook.					
2	I feel confident in my ability to control and customize my Facebook feed to see more relevant content.					
3	I can identify potential privacy risks associated with sharing personal information on Facebook.					
4	I regularly fact-check information before sharing it with others on Facebook.					
5	I make conscious decisions about the content I engage with on Facebook.					

	Behavioral Observation					
1	I actively seek out and follow reputable sources on Facebook for news and updates.					
2	I frequently share content, such as articles, videos, or posts, on my Facebook profile.					
3	I use Facebook to stay connected with friends, family, and colleagues.					
4	I have taken actions or changed behaviors based on information or campaigns I encountered on Facebook.					
5	I regularly review and update the information shared on my Facebook profile for privacy reasons.					
	Normative Beliefs					
1	People around me think it is appropriate to use Facebook to disseminate official health guidelines and updates related to COVID-19.					
2	People in my network believe it is important to support local businesses and initiatives through Facebook during the pandemic.					
3	In my social circle, there is a belief that using Facebook to provide emotional support and encouragement during COVID-19 is important.					
4	Others think it is appropriate to share personal stories or experiences related to coping with the pandemic on Facebook.					

5	Using Facebook for coordinating and offering help to others during COVID-19 is considered socially responsible by those around me.					
Digital Literacy						
1	I feel confident using Facebook to find and access information related to COVID-19.					
2	I understand how to engage with and share content responsibly on Facebook to prevent the spread of misinformation about COVID-19.					
3	I am comfortable participating in online discussions or groups on Facebook to learn more about COVID-19 and share my own experiences.					
4	I am confident in my ability to navigate Facebook's interface and features to access COVID-19-related content effectively.					
5	Overall, I consider myself digitally literate when it comes to using Facebook for COVID-19-related purposes.					
Engagement Metrics						
1	I regularly like or react to posts that provide valuable COVID-19 information on Facebook.					
2	I frequently share or repost COVID-19 updates and information with my Facebook network.					
3	I have joined or actively participate in Facebook groups related to COVID-19 discussions or support.					

4	I use Facebook as a source of entertainment to cope with stress during the COVID-19 pandemic.					
5	Facebook has played a role in providing a sense of connection and joy during the pandemic.					

SECTION (D): BEHAVIOR CHANGE COMMUNICATION

The following questions are to describe your digital communication behaviors and perceptions. Please indicate the degree to which you agree or disagree with the following statements. The levels of score are described as per the following:

Strongly Disagree	Disagree	Neutral (somewhat agree and somewhat disagree)	Agree	Strongly Agree
1	2	3	4	5

No.	Description	1	2	3	4	5
	Behavior Change Communication					
1	Information shared on Facebook about COVID-19 (wearing a mask, maintaining physical distance and etc.) has influenced my awareness of preventive measures.					
2	Facebook has been an effective platform for communicating behavior change messages related to COVID-19.					
3	The content related to behavior change on Facebook aligns with my needs and concerns during COVID-19.					

4	Facebook's interactive features, such as polls and quizzes, enhance the effectiveness of behavior change campaigns.					
5	I trust the information shared on Facebook regarding behavior change during COVID-19.					
6	I have taken tangible actions or changed my behaviors (physical distancing, avoid gatherings, hand hygiene and etc.) as a result of behavior change communication on Facebook.					

APPENDIX B: Output

Correlations							
		1	2	3	4	5	BCC
1	Pearson Correlation	1	.39**	.46**	.48**	.46**	.45**
	Sig. (2-tailed)		.000	.000	.000	.000	.000
	N	150	150	150	150	150	150
2	Pearson Correlation	.39**	1	.57**	.534**	.44**	.50**
	Sig. (2-tailed)	.000		.000	.000	.000	.000
	N	150	150	150	150	150	150
3	Pearson Correlation	.46**	.57**	1	.62**	.50**	.53**
	Sig. (2-tailed)	.000	.000		.000	.000	.000
	N	150	150	150	150	150	150
4	Pearson Correlation	.48**	.54**	.62**	1	.55**	.54**
	Sig. (2-tailed)	.000	.000	.000		.000	.000
	N	150	150	150	150	150	150
5	Pearson Correlation	.46**	.44**	.50**	.55**	1	.73**
	Sig. (2-tailed)	.000	.000	.000	.000		.000
	N	150	150	150	150	150	150
	Pearson Correlation	.45**	.50**	.52**	.54**	.73**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	

B	N	150	150	150	150	150	150
C							
C							

** . Correlation is significant at the 0.01 level (2-tailed).

Model Summary ^b										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.770 ^a	.593	.581	.5584	.554	48.320	5	145	.000	2.58

a. Predictors: (Constant), 1,2,3,4,5,6

b. Dependent Variable: BCC

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	68.568	5	13.714	44.219	.000 ^b
	Residual	50.552	145	.310		
	Total	119.120	150			

a. Dependent Variable: BCC

b. Predictors: (Constant), 1,2,3,4,5,6

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.310	.244		1.378	.168
	1	.042	.052	.040	.980	.329
	2	.135	.060	.145	2.780	.006*
	3	.075	.063	.085	1.220	.224
	4	.068	.072	.070	1.000	.318
	5	.610	.069	.575	9.850	.000
	6	.598	.072	.540	9.200	.000

a. Dependent Variable: BCC

BIODATA

Khin Nyein Chan Oo, also known as Chan, is Myanmar national from Yangon, Myanmar. She graduated from University of Information Technology (UIT), Yangon with a bachelor's degree of Computer Science (B.C.Sc in Business Information System) in 2017. She then pursued her career as Marketing and Communications Specialist starting her first professional job as Marketing Specialist in 2C2P Company Limited in Myanmar. After spending one and a half year in 2C2P Company, she realized her ambition to explore development communications and passion to work in International Development Organizations. Then, she worked as Communication Coordinator in two International Non-governmental Organizations (INGOs) called BRAC and Community Partners International for 4 years in Yangon, Myanmar. After earning development communications experiences in INGOs, she decided herself to become United Nations (UN) personnel and started joining World Health Organization (WHO) Myanmar as Communication Consultant for COVID-19 Emergencies Responses during COVID-19 pandemic in Myanmar in 2022. Her first UN assignment in WHO enlightened her to continue to evolve in development communications with growing expertise. When Myanmar faces political conflicts and coup in 2022, she moved to Bangkok, Thailand and transitioned to the Food and Agriculture Organization of the United Nations (FAO) Regional Office for the Asia and the Pacific to further expand her understanding of communication strategies in humanitarian and development contexts. At FAO, her UN assignment is as Regional Antimicrobial Resistance (AMR) Communication and Advocacy Specialist. And she continues to leverage her skills in strategic communication strategies, digital media, and stakeholder engagement, focusing on AMR mitigation in food and agriculture and food safety initiative under Regional Tripartite AMR Project in collaboration with FAO, WHO, World Organisation for Animal Health (WOAH) with the funding from European Union (EU). Driven by her passion for communication and a desire to deepen her academic understanding, she is currently pursuing her academic aspirations at Bangkok University. Her decision to study Master's of Communication Arts represents a strategic step in her professional development, aiming to integrate theoretical knowledge with her practical experience in international development communications. This independent study research interests now encompass crisis

communication, digital media strategies, and the role of communication in social change, with a particular focus on leveraging Facebook for effective communication in public health emergencies contexts.

Her professional journey in communication roles with UN organizations like WHO and FAO has deeply exposed to the critical importance of effective communication during public health emergencies. Working in Myanmar, a country with complex socio-political dynamics and diverse linguistic communities, she witnessed firsthand the challenges of disseminating critical health information during the COVID-19 pandemic. These experiences sparked her academic curiosity about how communication strategies can significantly impact public understanding, behavior change, and crisis management. This research on leveraging Facebook for behavior change communication emerges from a practical need she observed: the necessity of developing nuanced, culturally sensitive communication approaches that can bridge information gaps, particularly in resource-constrained settings. By examining the intersection of digital platforms, communication theories, and public health communication, she aims to contribute practical insights that can enhance crisis communication strategies not just in Myanmar, but in similar developing contexts in the Asia Pacific region.