Uniting communities: harnessing social capital for community resilience during coronavirus disease 2019

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Article Info

ABSTRACT

This research investigates the impact of both traditional and virtual social capital on community resilience, with engagement on social media as a mediating variable. The study surveyed 397 inhabitants of an urban sub-district in Palembang, Indonesia, and analyzed the data using the structural equation model partial least square (SEM-PLS) technique. The results indicate that it is critical to prioritize and activate various forms of social capital to enhance community resilience during the coronavirus disease 2019 (COVID-19) pandemic. The analysis showed that social media engagement had a significant positive impact on community resilience ($p<0.05$), however the influence of virtual bonding social capital was negligible and negatively skewed ($p=0.084$). It is significant to note that community resilience was significantly positively impacted by both traditional bonding and bridging social capital (both $p<0.05$). Social media involvement was also markedly positively impacted by virtual bonding and bridging social capital (both $p<0.05$). The link between virtual bonding, bridging social capital, and community resilience was strongly influenced by social media use in terms of mediation (both $p<0.05$). This emphasizes how important social capital, both physical and digital, and particularly social media participation, are to building community resilience during pandemics.

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1. INTRODUCTION

Natural and non-natural disasters cause massive financial damage and also have an impact on various social problems. Hence, it is an important and urgent need to build community resilience or capacity to rebuild lives and recover from disasters [1], [2]. In times of disaster, social capital or investment in relationships between individuals, communities, and social networks is a resource for building community resilience [1]. Such a bond is a glue that binds communities together in stressful situations and is a way out to rebuilding communities [3], [4].

During the coronavirus disease 2019 (COVID-19) pandemic, social capital plays a crucial role in unifying communities, but it also presents a potential risk to public health as a vector for human-to-human virus transmission [5]. Social capital can act as a negative force that endangers the community, contradicting the conventional understanding of social capital as a factor that enhances community resilience. The pandemic has forced individuals to limit their social interactions and rely on virtual means of communication, thus changing the nature of social capital and the way it is mobilized [6]. Following health protocols by physical

and social distancing and carrying out quarantine means directing social relationships and resources that are usually used to build community resilience during a disaster that becomes a threat in a pandemic [6].

Therefore, the community tries to build resilience, which is usually done through physical interaction into virtual interaction [7], [8]. Literature refers to this as virtual (online) social capital, which can compensate for the absence of traditional social capital (SC) when physical interactions or face-to-face meetings are prohibited through various regulations [1], [9]. There is a dearth of literature, particularly in developing countries, on nurturing and investing in virtual SC to build community resilience [10]. Although a few studies have explored the potential benefits of virtual SC during crises, there is a need for more research in this area as many communities, traditional social networks have long been a vital source of support and mutual assistance. However, the COVID-19 pandemic has disrupted these social structures, forcing individuals to rely more heavily on virtual interactions to maintain social connections [1]. This raises questions about the ability of virtual SC and engagement to replace traditional SC and interactions, and how they can contribute to building community resilience. The COVID-19 pandemic provides a unique opportunity to investigate this phenomenon and understand the potential role of virtual SC in promoting community resilience. In times of crisis, particularly in developing nations where traditional social networks may be lacking, policymakers and community leaders ought to contemplate the allocation of resources towards virtual SC and engagement on social media as a means of fostering community resilience.

This research addresses a gap in the existing literature on social capital and community resilience, which has mostly focused on developed countries [1] and often examined these concepts at a specific point in time, particularly after a disaster has occurred. This pandemic provides space to fill the gap due to the long period of crisis [1]. It also provides an opportunity to explore virtual SC, which is practically found in areas where the COVID-19 pandemic is not a natural disaster, so it does not disturb infrastructure, including communication infrastructure.

The purpose of this research is to investigate the link between traditional and virtual SC in the context of the COVID-19 pandemic, as well as their possible roles in strengthening community resilience. This study aims to contribute to a better understanding of how these two types of social capital interact to increase community resilience in times of disaster by exploring the interplay between them. The research gives insight on the potential benefits of virtual SC and how it might be used to help communities when traditional social networks are disrupted. The study's findings will be of interest to policymakers and community leaders looking to establish effective measures to improve community resilience during the COVID-19 pandemic and other emergencies. Finally, the project hopes to shed light on how traditional and virtual SC might be used to foster community resilience and social cohesiveness in the face of hardship.

2. LITERATURE REVIEW
2.1.1. Community resilience
Community resilience is defined as a community's collective ability to effectively cope with stressors and preserve normal functioning by working collectively [11]. The relationship with disaster is that community resilience is a predictor of efforts to overcome losses and recover from the impacts of disaster [12], [13]. In order to achieve resilience, communities must build and maintain partnerships with disaster management authorities, the general public, and organizations, as well as empower local action through social capital [14]. Moreover, efforts must be made to utilize and strengthen existing infrastructure, social networks, and assets.

2.1.2. Traditional and virtual social capital
Social capital is a resource that exists within a social network, either in tangible or intangible forms [15]. Investing in social capital and maintaining social relationships can provide support and assistance when needed. In social studies, two main types of social capital have been identified: bonding and bridging social capital. Bonding social capital pertains to strong relationships among family members, friends, and neighbors, which are characterized by significant levels of trust and mutual assistance [16], [17]. This type of social capital fosters a sense of belonging and identity within a community. Bridging social capital, on the other hand, refers to weaker connections between colleagues and acquaintances that bridge different backgrounds [18]. Social capital is also found in virtual spaces and has been studied on how to use, cultivate, and nurture it [1]. Virtual SC can predict community engagement, political participation, and higher welfare [6].

2.1.3. Formulation of hypothesis
Social capital that occurs in virtual spaces and is facilitated by social media may be associated with social capital that has been established in society and become a predictor of community resilience [1]. Practically, the community creates virtual spaces such as Whatsapp Groups to facilitate information and assistance in the COVID-19 pandemic situation. These virtual spaces actually existed prior to the COVID-19

pandemic and were used because of the need to minimize face-to-face interactions, even between family members. Therefore, the researchers assert that bonding social capital facilitated by social capital will generate shared norms and social trust virtually in close-knit communities. In addition, a shared sense of ownership can also increase activity participation [19]. Thus, the hypothesis in this study is:

H1: there will be a significant and positive correlation between virtual bonding social capital and community resilience

The role of social media in disaster situations has been broadly explored in the literature [20], [21]. Social media allows groups far from where the disaster takes place to provide moral, financial, and information support to groups experiencing disasters [22]. Further, the bonding social capital that occurs in the virtual space is facilitated by the existence of social groups that are willing to be involved and participate in community-related activities. Therefore, the formulation of the hypothesis is as:

H2: virtual bridging social capital positively and significantly affects community resilience

Numerous studies have confirmed that social capital plays a crucial role in promoting community resilience in various disaster situations [23]. Community resilience can be strengthened through the cultivation of both bonding and bridging social capital, as they provide different types of support in times of need. Bonding social capital is built through close relationships with family, friends, and neighbors, who can provide crucial social support and trust during disasters [24], [25]. These relationships often serve as the first line of support, offering aid, information, and emotional assistance to community members. High levels of bonding social capital can also help to foster communication channels and create mutual trust and norms among community members, which are crucial elements of community resilience [26]. Based on these arguments, the hypothesis is as:

H3: traditional bonding social capital positively and significantly affects community resilience

Bridging social capital as weak ties appear after bonding social capital is facilitated by family members, friends, and neighbors [11]. External parties provide information and resources for the recovery process of the disaster; it occurs in social networks within the community but may or may not be available [27]. Bridging social capital unites communities; across demographic, political, and social boundaries. This accumulatively will help to deal with more serious issues [28]. This type of social capital is facilitated by collaboration between actors. From these arguments, the hypothesis is as:

H4: traditional bridging social capital positively and significantly affects community resilience

The presence of bonding and bridging social capital in virtual environments can impact the level of community engagement on social media [1], [29]. Digital activities have been well recorded on social media because people not only use social media for personal gain but also engage in substantive activities such as signing online petitions and providing assistance through crowdfunding. This is done not only in the circle of neighbors, family members, and friends (bonding) but also communities that have demographic differences and political and geographical preferences as well. Involvement in the virtual space will facilitate the development of community resilience through the provision of material and non-material support as well as the exchange of information. Therefore, the hypotheses are as:

H5: There is a relationship between virtual bonding social capital and engagement on social media.
H6: There is a relationship between virtual bridging social capital and engagement on social media.
H7: Virtual bonding social capital has a positive and significant effect on community resilience through engagement on social media.
H8: Virtual bridging social capital has a positive and significant effect on community resilience through engagement on social media.

3. METHOD

To achieve the objective of thus study, an associative quantitative research approach is adopted, utilizing the structural equation model partial least square technique (SEM-PLS). This technique enables researchers to examine both the inner and outer models of the research [30]. The outer model is utilized to analyze the newly developed virtual SC measurement tool, as well as other variables such as community resilience and community

engagement on social media. The inner model is employed to examine the connections and influence among unobservable variables [30].

The analysis of this research centers on the family unit, with a particular emphasis on Ilir Barat I subdistrict, which has the highest incidence of COVID-19 transmission in Palembang City. According to the Palembang City Central Bureau of Statistics, the number of families in Ilir Barat I subdistrict in 2021 was 35.150 [31]. This study uses the slovin formula (5% margin of error and 95% confidence level) with a sample of 381 families. Questionnaires were distributed randomly (simple random sampling) to ensure the generalizability of research results.

2.1. Preliminary test

The statement items in this questionnaire were developed from the literature on traditional and virtual SC, community engagement on social media, and community resilience. These statements were revised into research instruments as part of the expert evaluation for content validation. In this case, researchers invite three sociologists and two communication experts for this matter. The experts' evaluation form contains a detailed discussion of each construct with the appropriate items used in the context of this study. The results of content validity are as: traditional bonding social capital (10 statements); traditional bridging social capital (10 statements); virtual bonding social capital (10 statements); virtual bridging social capital (10 statements); engagement in social media (13 statements) and community resilience (10 statements). Each statement item in this study was assessed with a content validity index (CVI) and kappa statistics to calculate agreement between experts. The results of expert and item validity were used for testing. The test was conducted on 30 respondents and found that the instrument used met the validity and reliability requirements. Thus, each item was adapted to build the final instrument used for data collection.

2.2. Data collection

This study was conducted in Palembang, in Ilir Barat I subdistrict, to be exact. This online-merge-offline (OMO) study uses a simple random sampling technique because it is objective and provides equal opportunities for each member of the population to be a respondent. This study is cross-sectional. The sample in this study is calculated using the slovin formula with a margin of error of 5% and a confidence level of 95% with 385 respondents. The questionnaire containing questions related to the demographics of the respondents and 16 statements was distributed offline and resulted in 412 respondents, of which 397 were employed to be analyzed. Informed consent to participate voluntarily in the study was stated in the questionnaire. The researchers also sought permission from the Ilir Barat 1 District Government to distribute questionnaires to its residents. The Human Research Ethics Committees of Universitas Sriwijaya approved this investigation involving human subjects with a reference number 103-2022.

2.3. Data analysis

This study uses three different applications. Microsoft Excel was used to help tabulate the data. SPSS 20 was used to check validity and reliability. SmartPLS 3 was used for data analysis. The criteria used in the validity test is to look at the anti-image matrix where the value for each item must be more than 0.50. For reliability criteria, the researchers check Cronbach's Alpha value, where the value must be above 0.70 [32]. The two stages used for PLS-SEM are the evaluation of the outer and inner models [30]. Based on the R-square, a model is considered strong, moderate, and weak if the R^2 value is more than 0.75, 0.50, and 0.25, respectively [30]. The path coefficient (b) is measured by if it is close to +1, then the relationship is positive and strong, while if it is close to -1, then the relationship is negative and strong [30]. The p-value for a relationship to be significant must be <0.05, and if it is above 0.05, then the relationship is insignificant [30].

4.   RESULTS AND DISCUSSION

4.1. Demographics of respondents

A total of 397 respondents filled out the complete questionnaire as shown in Table 1. The number of male and female respondents in this study is almost equal, with only one person difference. Likewise, the age percentage of respondents ranges from 5-13%, and the highest is between the age of 25-29 years, which is almost 13%. Based on their activities, most respondents are working (62.22%), while others are open unemployed, attending school, and are housewives. Based on the background of education, most respondents have a high school education (39.80%).

4.2. Outer model analysis

Table 2 presents the data regarding the standard loading values of each indicator. After conducting the calculations, indicators with values exceeding 0.70 are retained, while indicators with standard loading values less than 0.70 can be removed. As depicted in the table, all indicators have standard loading values

above 0.70, and are thus retained. Each indicator with a standard loading value greater than 0.70 indicates that the latent variable can explain 50% of the variance of each indicator. Based on the aforementioned calculations, it can be concluded that the indicators used in the study meet the established criteria.

Table 1. Demographics of respondents

Demographics of respondents	Frequency	Percentage
Gender		
Male	199	50.13%
Female	198	49.87%
Age		
15-19	44	11.08%
20-24	49	12.34%
25-29	50	12.59%
30-34	48	12.09%
35-39	46	11.59%
40-44	41	10.33%
45-49	37	9.32%
50-54	33	8.31%
55-59	27	6.80%
60-64	22	5.54%
Activity		
Working	247	62.22%
Open unemployed	27	6.80%
Students	36	9.07%
Housewives	87	21.91%
Background of education		
Elementary school	94	23.68%
Middle school	105	26.45%
High school	158	39.80%
College/University	40	10.08%

Table 2 also displays the composite reliability and Cronbach's alpha values for each research variable. For a variable to be considered reliable, the composite reliability value must be greater than 0.70, and the value of Cronbach's alpha must be more than 0.60 [30]. As presented in the table, the composite value for all variables exceeds 0.70, and the value of Cronbach's alpha is greater than 0.70. This indicates that all variables meet the criteria of the composite reliability test and Cronbach's alpha since the value surpasses the recommended threshold.

Regarding the AVE value shown in the table, it can be observed that the average variance extracted (AVE) value for each variable is above 0.50, with traditional bridging social capital (TSCBO) at 0.648, traditional bonding social capital (TSCBI) at 0.706, virtual bonding social capital (VSCBO) at 0.826, virtual bridging social capital (VSCBI) at 0.714, engagement on social media (SME) at 0.886, and community resilience (CR) at 0.692. If the AVE exceeds the predetermined value of >0.50, the indicator is retained [30]. As a result, there are no issues with convergent validity in the tested model.

Table 3 displays that the roots of the AVE of each construct are greater than their correlation with other constructs, according to the fornell and larcker criterion. The AVE root for the CR construct is 0.868, as the CR construct's AVE value in the previous construct reliability table is 0.692. The value of 0.868 is greater than its correlation with other constructs, such as 0.409 for CR to SME, 0.332 for CR to TSCBI, 0.557 for CR to TSCBO, 0.647 for CR to VSCBI, and 0.331 for CR to VSCBO. Similarly, the AVE root value of other latent variables is greater than their correlation with other constructs. Since all latent constructs have an AVE value greater than their correlation with other constructs, all variables in the study meet the criteria.

4.3. Inner model analysis

In Table 4, the results indicate that there is a significant positive effect of engagement on social media (O=0.219) on community resilience. The construct relationship's t-statistic value (8.079>1.96) and p-value (0.0000.05) demonstrate this. With a t-statistic value of 1.7331.96 and a p-value of 0.084>0.05, virtual bonding social capital has an insignificant negative influence (O=-0.038) on community resilience. As a result, the hypothesis (H1) positing a beneficial influence of virtual bonding social capital on community resilience is rejected.

Table 2. Outer model analysis

Variables	Items	Standard loadings	Cronbach's α	Composite reliability	AVE
TBSCI	TSCBO1	0.787	0.848	0.881	0.648
	TSCBO2	0.803			
	TSCBO3	0.860			
	TSCBO4	0.858			
	TSCBO5	0.845			
	TSCBO6	0.761			
	TSCBO7	0.833			
	TSCBO8	0.872			
	TSCBO9	0.751			
	TSCBO10	0.834			
TBSCO	TSCBI1	0.873	0.940	0.956	0.706
	TSCBI2	0.877			
	TSCBI3	0.861			
	TSCBI4	0.870			
	TSCBI5	0.902			
	TSCBI6	0.894			
	TSCBI7	0.878			
	TSCBI8	0.903			
	TSCBI9	0.912			
	TSCBI10	0.726			
VBSCO	VSCBO1	0.766	0.739	0.773	0.826
	VSCBO2	0.850			
	VSCBO3	0.767			
	VSCBO4	0.745			
	VSCBO5	0.823			
	VSCBO6	0.763			
	VSCBO7	0.822			
	VSCBO8	0.878			
	VSCBO9	0.858			
	VSCBO10	0.752			
VBSCI	VSCBI1	0.848	0.716	0.762	0.714
	VSCBI2	0.833			
	VSCBI3	0.799			
	VSCBI4	0.783			
	VSCBI5	0.761			
	VSCBI6	0.846			
	VSCBI7	0.745			
	VSCBI8	0.709			
	VSCBI9	0.738			
	VSCBI10	0.825			
SME	SME1	0.724	0.881	0.887	0.886
	SME2	0.731			
	SME3	0.740			
	SME4	0.795			
	SME5	0.859			
	SME6	0.744			
	SME7	0.844			
	SME8	0.752			
	SME9	0.837			
	SME10	0.773			
	SME11	0.701			
	SME12	0.795			
	SME13	0.727			
CR	CR1	0.820	0.946	0.956	0.692
	CR2	0.902			
	CR3	0.888			
	CR4	0.895			
	CR5	0.887			
	CR6	0.752			
	CR7	0.732			
	CR8	0.880			
	CR9	0.888			
	CR10	0.861			

The findings of the investigation into how various forms of social capital and participation on social media affect community resilience are shown in Table 4. The results show that while virtual bonding social capital has an insignificant negative effect and virtual bridging social capital has an insignificant positive effect on community resilience, social media engagement has a large beneficial impact on community resilience. According to the statistics, there isn't any proof to back up H1 and H2, which contend that virtual bridging and

bonding social capital have positive effects on community resilience. The research supports the findings of H3 and H4, which suggest that traditional bonding social capital and traditional bridging social capital have significant positive effects on community resilience. Furthermore, the results support H5 and H6, which imply that virtual bonding and virtual bridging social capital have a significant favourable impact on social media engagement. Additionally, the study looks at how social media engagement influences the relationship between virtual bridging and virtual bonding social capital and community resilience. The results of the analysis of the specific indirect effects table show that the effects of virtual bridging and virtual bonding social capital on community resilience are mediated by social media engagement.

Table 5 shows that the connection between virtual bonding social capital and community resilience is positively affected by engagement on social media, as demonstrated by the t-statistic value of 7.650, which is above the threshold of 1.96. Additionally, the relationship between virtual bridging social capital and community resilience is also positively influenced by engagement on social media, with a t-statistic value of 5.547, which surpasses the threshold of 1.96. Therefore, the study accepts H7 and H8, and the community resilience variable fully mediates the relationship. This is referred to as full mediating effect testing, where the mediating variable (engagement on social media) has a significant effect on community resilience, and the main effect of virtual bonding social capital and virtual bridging social capital on community resilience is not significant.

Table 3. Discriminant validity through the fornell-larcker criterion

Variables	CR	SME	TSCBI	TSCBO	VSCBI	VSCBO
CR	0.868					
SME	0.409	0.821				
TSCBI	0.332	0.574	0.840			
TSCBO	0.557	0.636	0.614	0.894		
VSCBI	0.647	0.399	0.327	0.273	0.860	
VSCBO	0.331	0.439	0.238	0.420	0.281	0.871

Table 4. Hypothesis testing

Hypothesis	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	p-values
SME -> CR	0.219	0.223	0.027	8.079	0.000
VSCBO -> CR	-0.038	-0.038	0.022	1.733	0.084
VSCBI -> CR	0.019	0.016	0.018	1.068	0.286
TSCBO -> CR	0.372	0.372	0.036	10.327	0.000
TSCBI -> CR	0.454	0.453	0.033	13.585	0.000
VSCBO -> SME	0.368	0.371	0.033	11.257	0.000
VSCBI -> SME	0.303	0.305	0.032	9.345	0.000

Table 5. Hypothesis testing with intervening variables

Relationship direction	Original Sample (O)	Sample Mean (M)	Standard deviation (STDEV)	T Statistics (|O/STDEV|)	p-values
VSCBO -> SME -> CR	0.081	0.082	0.011	7.650	0.000
VSCBI -> SME -> CR	0.067	0.068	0.012	5.547	0.000

4.4. Discussion

The phenomenon of community resilience in global disaster situations is an interesting topic to study because it can empower people and their communities to face challenges and develop strategies to minimize the impact of disasters [33]. This study explores the factors that determine community resilience during the COVID-19 pandemic by proposing virtual and traditional SC in terms of bonding and bridging, and by using community engagement on social media as an intervening variable. The study examines how individuals in Palembang, Indonesia, are dealing with the challenges of the COVID-19 pandemic and identifies traditional and virtual SC as predictors. The findings show that community engagement in virtual networks on social media is important for building community resilience [34]. Furthermore, the research revealed that face-to-face connections and bridging social capital have a direct impact on community resilience, while virtual connections and bridging social capital are linked to community resilience [35], [36].

The research underscores that the significance of bonding and bridging social capital in promoting community resilience during the COVID-19 pandemic differs from their role in fostering general disaster resilience. Individuals depend on close relationships with family and friends, which are considered strong ties in social networks, to provide them with emotional support and direct assistance during times of need

[37], [38] conversely, loose connections that link individuals to other communities or networks can provide them with entry to authority, knowledge, and materials that they might not find in their own community [9].

During the COVID-19 pandemic, the significance of bridging social capital lies in it is capacity to improve community resilience through granting access to external assistance and professional networks. This can offer essential information and resources like availability of medical equipment, work schedules, and potential lockdowns [7], [9]. However, in the current crisis, strong ties are more important than weak ties in building resilience. Natural disasters have a profound effect on the physical and mental well-being of communities, and the long-lasting pandemic exacerbates the psychological stress that is not immediately visible [39]. The importance of bonding social capital in the COVID-19 pandemic arises from the fact that it provides emotional and social support, which is crucial for individuals to maintain confidence in their community's preparedness and recovery, given the uncertainty surrounding the pandemic's end. The physical distancing measures that have been put in place to contain the spread of the virus have restricted face-to-face interaction, which has impeded the development of trust, hope, and perceptions of preparedness among members of the community [33], [40]. Thus, while bridging social capital is crucial for rebuilding physical damage caused by natural disasters [4], [41], bonding social capital plays a vital role in sustaining community resilience during the COVID-19 pandemic situation [9].

However, as the crisis worsens, the need for strong ties to build resilience is more important than weak ones. Major natural disasters have an impact on the physical and psychological health of the community, especially the long pandemic that causes psychological stress the eyes cannot see directly [1], [39]. The COVID-19 pandemic's uncertain duration has made bonding social capital crucial for people to maintain confidence in their communities' preparedness and recovery. Physical distancing, one of the primary strategies to control the pandemic, has limited face-to-face interaction and connection that contributes to building perceptions of preparedness, trust, and hope among community members [33], [40]. Therefore, while bridging social capital is essential for recovery from physical damage caused by natural disasters [41], bonding social capital is vital for maintaining community resilience during the COVID-19 pandemic.

During the COVID-19 pandemic, engagement on social media by the community refers to the active and ongoing interactions between individuals on social media platforms and other members of their community [1], [40]. This study discovered that social media participation by sharing information and providing assistance is a significant predictor of community resilience, including seeking information, seeking social support, and avoiding certain topics. Community resilience is seen as a problem-solving approach in which individuals proactively take action to deal with stressors and adjust their resilience as they reassess their situation [4]. In the context of a pandemic, individuals who assist others in their community by providing information, sharing experiences, or connecting them with resources are actively engaging themselves in problem-solving efforts [42], [43]. They regularly evaluate the difficulties they face and determine if they should acquire additional information, emotional and social assistance, or refrain from discussing specific topics if they view the pandemic as insoluble [40].

This study discovered that when people provide information and assistance on social media, it can have a positive impact on community resilience, which includes activities such as seeking information, seeking social support, and avoiding certain topics. Community resilience is viewed as a problem-solving approach, where individuals take proactive measures to address stressors and adjust their resilience as they progress and re-evaluate their situation [4]. During a pandemic, individuals who provide assistance to their community by sharing information or experiences, or offering support, are actively engaged in addressing problems [33]. As an ongoing process, they assess the challenges they face and make decisions to obtain more information, seek support, or avoid certain topics if they believe that the pandemic cannot be solved.

This study emphasizes the significance of community involvement on social media as a predictor of community resilience. Generally, people establish and maintain social capital by utilizing social media to enhance it [44], [45]. Initially, during the COVID-19 pandemic, bonding and bridging social capital on social media were only related to people's perception of community resilience but not directly associated with community engagement on social media. However, this study discovered that community engagement on social media is crucial for strengthening both strong and weak ties on social media, which can predict community resilience. Previous studies have also suggested that community engagement on social media is a fundamental part of the community resilience mechanism and plays a vital role in activating the potential of social capital on social media for better community resilience [9], [46].

To promote community resilience, it is crucial for communities to evaluate their strengths and weaknesses, maintain their ability to adapt, recognize existing problems, and create plans for improvement [47]. This study suggests that by offering assistance online, community members become aware of their community's weaknesses and ineffective approaches in dealing with the pandemic. Consequently, they are more likely to view their community as resilient and seek information, support, and help on social media.

This study emphasizes the significance of upholding community resilience and receiving acknowledgement from both academics and practitioners in establishing robust communities to enhance public

health [34]. By providing insights from the community on how individuals attain community resilience during the pandemic, this study underscores the value of engagement on social media as a community disaster management approach during the COVID-19 pandemic. The results of this study can be employed to enhance community resilience by strengthening networked social capital through the utilisation of social media platforms. The adherence to physical limits is of utmost importance in a health crisis such as the COVID-19 epidemic, since it necessitates the population's compliance. In this context, social media assumes a pivotal role as the major means of communication inside the community. This study underscores the necessity of cultivating resilience within the COVID-19 epidemic and underscores the importance of employing such techniques to alleviate the detrimental consequences of health crises.

5.   CONCLUSION

The findings of the study suggest that the COVID-19 pandemic presents distinct obstacles that necessitate the mobilisation of several forms of social capital to foster community resilience. To cultivate resilience, it is imperative to employ a comprehensive range of connections, encompassing both virtual and physical forms of connecting and bridging. The research underscores the significance of robust connections, namely those established on online social platforms, in assessing the level of community resilience within the ongoing pandemic. Furthermore, this study makes a valuable contribution to the advancement of social capital theory by uncovering the unique characteristics of various forms of social capital and their diverse impacts on the resilience of communities. Furthermore, the active involvement of individuals within a community on social media platforms plays a crucial role in fostering both bonding and bridging social capital connections, ultimately contributing to the development of community resilience. The study's scope is constrained by its utilisation of survey methods and a cross-sectional design, hence restricting the ability to establish causal correlations between variables. Additional research is required in order to expand upon the discoveries made in this study.

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