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EDITOR'S NOTE

Shifting Information Order

Whoever holds power dictates information flow. This worldview has permeated many realms of society such that the decision to create, reproduce, and disseminate messages is controlled by powerful actors or structures. Nothing is inherently wrong with the downward fashion of communication particularly when the intent of the source is articulated with clarity, purpose, and propriety. In fact, in many instances, communication that springs from the top layer of the communication hierarchy produces outcomes beneficial to its intended audiences. This is true when the power to decide on the communication flow resides on the powerful actor that has access to communication infrastructures built to open the gates of information for the target receivers to consume.

However, what makes top-down communication an area of concern is when certain voices are excluded in discursive platforms that should otherwise be open or non-restrictive because the essence of communication is just that. When information flows are restricted towards certain directions that ought to provide spaces for less powerful actors but whose roles are equally important as those who hold power, the contributions of those actors become taken for granted and their ability to challenge status quo and effect social change are lost.

In this issue, FRAMEwork offers insights, interrogations, and propositions about the different realms of communication from an alternative standpoint. The concept of violence against the backdrop of barangay governance is scantily explored in the Philippines. By studying how peace communication intersects with domestic conflicts and governance, a localized understanding of economic issues, cultural differences, and even physical violence against men as conflict sources and how they are communicatively resolved is brought to light.

Localized communication can be viewed not just from the lens of peace communication but also risk communication. If there is anything that knows better how natural disasters can be mitigated, it is the community that experiences them. At a time when floods are submerging communities and destroying lives and properties more than ever, it is opportune to have a local-based approach to solving the issue. A community- and participatory-oriented framework in the realms of risk communication and crisis management is proposed in an attempt to better facilitate knowledge transfer of flood mitigation strategies in flood-prone communities. By doing so, the focus is decentralized from the government as the predominant actor of disaster mitigation initiatives.

More decentralizing discourses are presented in a proposition that veers away from the corporate-orientedness of crisis communication. The grassroots ethics care framework questions the existing frameworks in crisis management marked by their biases towards the interests of corporations that inevitably erase grassroots experiences. By reversing the conversations and turning scholarly attention to the unheard voices of publics during a crisis, the framework that puts a premium on those who experience crisis from the margins, whether it is sanctioned by the organization or not, gives an alternative view of crisis communication.

From crisis conversations involving the grassroots, information shifts are also noted on the level of a powerful media entity during a health crisis. As a pillar of truth, a news organization takes the lead in rectifying false information online about the pandemic. It is no longer just a storyteller that gathers information from the ground. It has turned into an information source that weaponizes fact-checking mechanisms to fight the persuasive but misleading and sometimes outright wrong information about the pandemic that plagued the world. It is a war of verified information versus disinformation whose battleground is found on digital platforms.

The prudent use of technology not only challenges health-related discourses on digital spaces but also provide hope for the individual who heavily consumes digital information to reverse unhealthy practices. In the age of digital communication, the role of memes has shifted from providing entertainment and political commentaries to pushing health-related discourses. The popular use of memes and the less-talked-about health issues among the digital natives prove to be an effective formula in putting forward health agenda aimed at cognitive and behavioral changes among the said demographic. The intersections of pop culture, health, and the generation Z illustrate the persuasive power of audience-centered messaging, which may not necessarily be a novel idea but whose potency is often overlooked by producers of socially relevant messages.

Shifting the focus on less discussed scholarly conversations begs the question, “what can alternative worldviews offer to change the status quo?”

Rowena Capulong Reyes, Ph.D.

Exploring violence and peace communication in barangay governance: A case study of Barangay Nagbunga in Zambales, Philippines

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ABSTRACT

In the Philippines, the barangay is the smallest unit of the government and this does not exempt them from experiencing any violence. Despite this, there is a notable dearth of literature focusing on violence and peace communication within this microcosm of governance. This study responds to this gap by applying Johan Galtung's integrated framework of the Violence Triangle and Peace-Work Triangle. It aims to (a) incorporate the experiences of barangay officials encountering both direct and indirect violence within their communities and (b) extend peacekeeping, peacemaking, and peacebuilding initiatives. The selected barangay for this study is Barangay Nagbunga, under the municipality of Castillejos in the province of Zambales, with approximately 7,000 residents, predominantly living in poverty. Utilizing interpretivism, researchers conducted in-depth interviews with volunteer informants from Barangay Nagbunga, employing thematic analysis with open and axial coding to explore conflicts and peace communication's role in resolution. While resident participation exists to some extent, it remains relatively inactive. The study identifies prevalent conflicts: (1) domestic disputes involving physical violence within households, unveiling a nuanced understanding that men are also being subjected to abuse by their partners; (2) structural violence related to poverty and land disputes; and (3) cultural clashes stemming from diverse backgrounds towards financial matters and economic priorities. The lack of community cooperation in conflict resolution processes showcases significant challenges, reflecting broader issues in local governance. Effective resolution demands a multifaceted approach, encompassing trust-building, understanding of cultural differences, emphasis on Filipino beliefs, enhancement of officials' skills, and promotion of community participation.

Keywords: *Conflict, Violence, Barangay, Violence Peace-Work Triangle, Violence Triangle*

INTRODUCTION

The Barangay, being the smallest administrative sector in the Philippines, is considered the most immediate level of government to the people (Kendall, 1976). Historically, Barangays have been the primary social organization in Filipino communities, dating back to pre-colonial times (Porio & Roque-Sarmiento, 2019). This grassroots level of governance plays a critical role in local administration and community management (Boysillo, 2017). Each Barangay operates under the mandate of the Local Government Code of 1991, which emphasizes local autonomy and community-based governance (Republic Act No. 7160, 1991). Barangays are headed by the barangay officials.

Barangay officials are pivotal in administering local governance and ensuring the welfare of their constituents (Boysillo, 2017). The Barangay Captain, or *Punong Barangay* (also known as the barangay chairperson), leads this team, supported by seven councilors or *Barangay Kagawads*, and a secretary and treasurer (Porio & Roque-Sarmiento, 2019). The effectiveness of Barangay governance significantly depends on these officials' leadership, integrity, and community engagement (Manding, 2020). These officials are responsible for various tasks, including dispute resolution, maintaining peace and order, and implementing local policies and development programs (Boysillo, 2017).

Conflicts at the Barangay level are often rooted in interpersonal or interfamily disputes, land issues, and minor criminal offenses. The Barangay Justice System, known as the *Lupong Tagapamayapa*, is integral to resolving these conflicts at the local level as this system emphasizes alternative dispute resolution methods, aiming to resolve conflicts amicably without resorting to the formal court system (Ybañez, 2013). However, challenges arise due to factors such as "unequal power distribution, moral or cultural differences, personality conflicts, conflicting values and expectations, and miscommunication" (Jumalon *et al.*, 2018; Udoudom *et al.*, 2023, as cited in Jacinto, 2023, p. 199). Despite the existence of the Barangay Justice System as a localized dispute resolution mechanism, the Philippine justice system is not immune to systemic inequities, particularly for economically disadvantaged individuals. As highlighted by Lopez (2009), despite the poor litigants' determination to assert their innocence, they were subjected to physical abuse by community police (*barangay tanod*) and the police aimed at coercing confessions to crimes they did not commit. These experiences of mistreatment, alongside a lack of resources to challenge abuse, emphasize the power imbalances within the justice system—where people experiencing poverty are disproportionately targeted and subjected to abuse by those positions of authority. Within this context, the Barangay Justice System's potential to address conflicts and promote justice is significantly constrained, reinforcing the need for innovative approaches that address these socio-economic inequalities while enhancing the accessibility and effectiveness of local governance.

This study is situated at the intersection of political communication, leadership communication, and legal communication. By examining how Barangay officials handle conflicts and promote peace within their communities, it explores the ways in which communication strategies are used to navigate the legal structures of the Barangay Justice System, foster trust among community members, and facilitate participatory leadership in local governance. Political communication provides a lens to understand how messaging and discourse impact governance, while leadership communication indicates the role of interpersonal and organizational strategies in managing conflicts and driving initiatives. The integration of legal communication highlights the pivotal role of law and order mechanisms within the barangay as a microcosm of governance. Through this multidisciplinary perspective, the study aims to provide a holistic understanding of peace and violence communication at the grassroots level in the Philippines.

The selected barangay for this study is Nagbunga. It is a barangay under the municipality of Castillejos in the province of Zambales in the Philippines. As of January 2024, Barangay Nagbunga consists of approximately 7,000 residents, with the majority of the population living in poverty. The most common type of job in this barangay is blue-collar jobs. Blue-collar jobs usually involve manual labor, including manufacturing, mining, and construction workers (Dhir, 2023).

Barangay Nagbunga has two areas: the Barangay Nagbunga Proper and the Hanjin Village. In 2013, Hanjin Shipping Company launched a housing project called the “Hanjin Village” on a 33-hectare plot of land in Barangay Nagbunga, the purpose of which is to provide accommodation for Hanjin’s employees and their families (Aglibot, 2023). However, the shipping company declared bankruptcy in 2017, leading to unemployment for its workers and leaving them without a source of income—such a case is an example of interpersonal conflicts with broader socio-economic issues.

To better understand the dynamics of these conflicts and the role of the Barangay Justice System, the study utilized Galtung’s (1969) Theory of Conflict, providing a comprehensive two models—the Violence Triangle and Peace-Work Triangle linking the connection between the different forms of violence—(a) direct, (b) cultural, and (c) structural, which, in turn, can facilitate or impede violence. The latter has been applied to understand how peace is being communicated, promoted, and established within the community.

Without the assistance of the barangay officials and its peace and order committee, it is impossible to reconcile the violence, conflicts, and disagreements between the constituents. In the Philippines, there is a lack of literature zooming in on violence and peace communication within the small unit of the government. Hence, this study aims to answer the question, “What are the common conflicts that Barangay Nagbunga

encounters that necessitate the implementation of peacekeeping measures?" In order to answer the query, the study aimed to: (1) identify the types of conflicts that commonly arise within the selected barangay; (2) explore the existing communication strategies employed within the selected Barangay to promote peace and resolve conflicts; (3) identify obstacles and challenges faced by the barangay officials involved in peace communication initiatives; and (4) provide implications and recommendations for strengthening peace communication at the barangay level.

Contributions to the different violence encountered by the barangay officials will lead to a better understanding of how an individual behaves in society and, consequently, how society influences their attitudes in engaging in violence—underlying and addressing the root causes of this violence. Moreover, this will help policymakers and local authorities develop a model to strengthen the effectiveness of peace communication in the barangays.

Barangay Justice System in the Philippines

As a community mediation program, the Barangay Justice System (BJS) in the Philippines plays a critical role in delivering speedy, cost-efficient, and quality justice through non-adversarial processes (Rojo, 2002). This system emerged in response to the inefficiencies of the formal judicial system, characterized by long delays, overload, and backlog, as well as corrupt practices (Rojo, 2002). These challenges have disproportionately impacted people experiencing poverty, necessitating an alternative dispute resolution (ADR) mechanism like the BJS.

The BJS, known as Katarungang Pambarangay, is a pivotal community-based dispute settlement mechanism in the Philippines (Metillo et al., 2022). This system is fundamental in the context of the Alternative Dispute Resolution Act of 2004, which promotes autonomy in resolving disputes and supports the enforcement of human rights and justice at the barangay level (Metillo et al., 2022).

Initially recognized under the Marcos dictatorship in 1978 and later consolidated within the decentralization framework of the 1991 Local Government Code (LGC), the BJS represents a significant shift in the approach to justice delivery in the Philippines (Rojo, 2002). This system embodies the decentralization of powers from the central government to the barangays, offering a platform for resolving family and community disputes at the local level.

The BJS operates within a complex socio-political context, bridging the gap between legality and practical implementation. Its strengths lie in alleviating court congestion and enhancing access to justice, particularly for marginalized communities (Rojo, 2002). However, it faces challenges in operational effectiveness and adherence to legal mandates. NGOs (nongovernmental organizations), like the Gerry Roxas Foundation, have

been instrumental in collaborating with government agencies to strengthen the BJS and advocate for further judicial reforms (Rojo, 2002).

Additionally, studies like that of Acbay et al. (2021) provide empirical insights into the functioning of the BJS. Their research in the Municipality of Buenavista evaluated the effectiveness of arbitration, conciliation, and mediation within the BJS. They found that most barangay captains and *Lupong Tagapamayapa* (barangay court) are proactive in resolving disputes, with a majority of cases relating to slander and debt collection. However, there remains a significant number of unsettled cases, highlighting the need for further improvement in dispute resolution skills among barangay officials (Acbay et al., 2021).

The BJS in the Philippines is a pioneering approach to justice that caters to the specific needs of local communities. Its success hinges on the effective decentralization of judicial powers, the commitment of local officials, and the support of civil society organizations. While it has made significant strides in providing accessible and efficient justice, especially to the disadvantaged, ongoing efforts are needed to enhance its operational effectiveness and fully realize its potential as an alternative to the formal judicial system.

Barangay Conflicts in the Philippines

In the Philippines, the Barangay Justice System (BJS) plays a pivotal role in resolving conflicts within communities, a reflection of the nation's commitment to maintaining harmony and order at the grassroots level. Conflicts in barangays, as explored in various studies, can be categorized into criminal, civil, and miscellaneous cases, each requiring different approaches for resolution.

The most frequent criminal cases involved physical injuries, often resulting from group or gang wars among young boys, especially at night (Mohammed & Caingat, 2017). Other common criminal cases included robbery or theft, threats, slander or oral defamation, damage to property, coercion or unjust vexation, trespassing, and *estafa* (or swindling) (Mohammed & Caingat, 2017). Moreover, civil cases primarily involve the collection of debts or rentals, family or marital relations, demand for specific performance of obligations arising from breach of contracts, damages, and ejectment. The highest number of civil cases pertained to the collection of debts or rentals, highlighting the economic challenges faced by residents (Mohammed & Caingat, 2017). Lastly, miscellaneous cases included violation of local ordinances, labor cases, boundary disputes, and agrarian cases, illustrating the complexities of local governance. Violation of local ordinances constituted the majority of miscellaneous cases (Mohammed & Caingat, 2017). The causes of these conflicts are diverse, stemming from unequal power distribution, cultural differences, personality clashes, and

miscommunication (Jacinto et al., 2023). These conflicts, if not adequately addressed, can lead to decreased productivity, loss of trust, and even violence, making it crucial to understand and effectively manage them.

The resolution of conflicts in barangays involves a combination of effective communication skills and emotional intelligence. Barangay chairpersons play a crucial role in this process, with their ability to listen, use appropriate language, and understand different perspectives being key to successful conflict resolution (Jacinto et al., 2023). Personal traits such as neutrality, honesty, and the ability to confront issues directly are also vital (Jacinto et al., 2023). However, the resolution process varies across barangays, with some experiencing a significant number of unresolved cases, indicating challenges in the system (Acbay et al., 2021). The Barangay Justice System serves as a culturally sensitive and community-centered approach to conflict resolution in the Philippines. Its effectiveness depends on the competencies and approaches of local officials. Enhancing these skills and strategies is essential for maintaining peace and harmony within communities.

Case Studies of Peacekeeping in Barangay

The literature on peacekeeping in the barangays of the Philippines, as revealed through various case studies, highlights the effectiveness and challenges of maintaining peacekeeping within the barangay.

Several challenges have been identified in the case studies. Orenze et al. (2021) highlight the complexity of managing conflicts within barangays, where local politics and personal interests often intertwine. This challenge is exacerbated by the lack of adequate training and resources for barangay officials, as noted in the study by Doquilla et al. (2023). Additionally, Laroza et al. (2022) emphasize the role of social media in exacerbating conflicts, requiring barangays to adapt to new communication dynamics.

Moreover, community-based approaches are central to successful barangay peacekeeping. Gupit and Cuevas Jr. (2022) highlight the importance of community participation in conflict resolution, emphasizing the need for collaborative decision-making processes. Bienes et al. (2022) explore the significance of cultural competence in peacekeeping, recognizing that understanding local customs and traditions can foster better relationships and trust within the community.

Capacity building and training emerge as recurring themes in the case studies. Doquilla et al. (2023) advocate for the provision of training programs for barangay officials to equip them with the necessary skills for conflict resolution and peacekeeping. Orenze et al. (2021) similarly stressed the need for capacity-building efforts at the barangay level to enhance the effectiveness of peacekeeping initiatives.

Furthermore, the role of technology and communication in peacekeeping is another prominent aspect. Orenze et al. (2021) discuss the potential of technology to improve transparency and accountability in barangay governance. However, Laroza et al. (2022) caution against the misuse of social media platforms for spreading misinformation and inciting conflicts, emphasizing the importance of responsible communication.

Sustainability is a key consideration in barangay peacekeeping. Gupit and Cuevas Jr. (2022) stress the need for long-term solutions and the cultivation of a culture of peace within barangays. This involves not only resolving immediate conflicts but also addressing the root causes and fostering a sense of unity and cooperation among community members.

Taken all together, peacekeeping in the barangays of the Philippines is a complex and dynamic process. It involves addressing various challenges, including the influence of local politics, resource constraints, and the impact of technology on communication. Community-based approaches, cultural competence, capacity building, and responsible use of technology are essential elements in successful peacekeeping initiatives. Moreover, sustainability and long-term peace require a holistic approach that goes beyond conflict resolution to promote lasting harmony and unity within barangays. The insights from these case studies collectively contribute to a comprehensive understanding of the intricacies of peacekeeping at the grassroots level in the Philippines.

This study addresses the scarcity of literature in terms of identifying conflicts on the smallest scale of government and their interdependent relationships in peace studies. Furthermore, the emergence of themes will contribute to the literature gap applied in the Philippine context, specifically how Galtung's (1969) Conflict theory encompasses how structures and cultures can affect direct violence, which has never been studied in the local context.

Study Framework

Taxonomy of Violence

John Galtung, the founder of peace studies, explores the relationship between peace and violence by first emphasizing the need to define violence (Galtung, 1969)—violence as anything that compromises or prevents individuals from achieving their full potential—whether mentally or physically. Galtung (1969) extends this violence by developing a taxonomy of violence wherein he argues that societal violence encompasses not only the direct forms of violence but also includes the indirect (invisible) that also legitimizes and justifies the act of violence. Direct violence, the easily identifiable act, refers to physical force on an individual, such as physical assault, but this also extends to psychological abuse (Kaufman, 2014). Indirect violence, on the other hand, is composed of structural and

cultural elements. Structural violence is manifested through economics and politics, specifically the unequal distribution of power and resources built by the social system (Vorobej, 2008). This kind of violence is most noticeable on a societal level, which affects the entire group of citizens. For example, with unequal access to education, regardless of background, all individuals must have the opportunity to receive a good quality education. Moreover, cultural violence refers to harmful cultural norms (Galtung, 1990), such as hate speech, which is a result of their religion, culture, or traditional practices. As Galtung contends, cultural violence can normalize or justify direct and structural violence. This influences how an individual perceives and responds to violence. Moreover, the interconnectedness of these forms influences one another in understanding the dynamics of violence. In that way, one type of violence can lead to more violence (Galtung & Fischer, 2013).

Galtung's Concept of Peace

Johan Galtung (1969) explains that peace is understood in its most comprehensive form as the absence of violence in all its manifestations—encompassing both direct and indirect. He further defines peace as not just about the absence of violence but also a dynamic condition that allows conflicts to be resolved in positive and creative ways. Instead of just focusing on his first definition of peace, Galtung (1969) let his scholars understand how conflicts are handled without escalating to violence. Culture of peace, in this case, is the societal or individual mindset and set of practices that prioritize non-violence. A culture of peace fosters environments internally and externally where violence is replaced by understanding, dialogue, and solutions, promoting equality, justice, and harmony.

Consequently, in his quest for a comprehensive understanding of peace, Galtung (1969) then introduced two types of peace—(1) positive peace and (2) negative peace. Positive peace is characterized by the presence of justice, cooperation, and human rights in addressing the root causes of all violence—it also requires collective efforts in fostering cooperation between different groups (Galtung, 1990). In comparison, negative peace refers to the temporary absence or lack of overt violence (Gay, 2008). In a simpler term, it is a “short-term time horizon” (Shields, 2017, p. 6); it is seen as a necessary but insufficient condition for peace. This is because merely ending visible violence does not automatically imply a resolution of the underlying causes of the conflict such as inequality or discrimination. For instance, in some cases, a government might maintain peace by suppressing opposition through violence or censorship but not addressing the root causes of discontent. Indeed, the government might be able to control the situation, but does not provide equality for its people—which makes the peace fragile. In 1969, Galtung introduced the connection between positive peace and structural violence. He argued that for a society to truly be at peace (positive peace), there is a need to get rid of structural violence. He believed that even

if there is no direct violence happening, people can still suffer because of unfair systems in society – which he called structural violence. The peace-work triangle

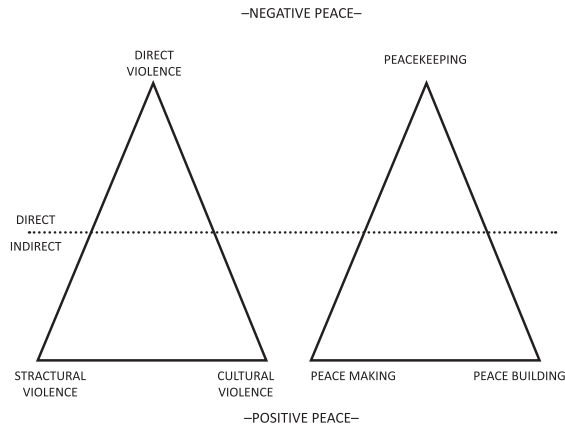
Galtung (1996) also presents a framework to contribute to the understanding and resolution of conflicts. This approach has three distinct approaches to peace-work: peacekeeping, peacemaking, and peacebuilding. Peacekeeping refers to the early stage of transforming peace by attempting to maintain and restore peace, ensuring the prevention of any resurgence of conflict. Peacemaking is about how an individual or an officer addresses the urgent situation of both parties and prevents this situation from becoming more violent (Galtung, 1996; Teresa, 2017). Lastly, peacebuilding is about identifying the root causes and effects rather than solely focusing on eliminating the conflict—and this is done through the help of national and international scales. This goes deeper into how an officer should aim to address the contradiction between parties by addressing the root issues causing the conflict.

Integrated Theoretical Framework

An integrated framework of the Violence Triangle and Peace-Work Triangle introduced by Galtung has been utilized to provide a solid foundation for the connection between violence and how it translates to peace and transformation. The study of McInerney and Archer (2023) provided a nuanced understanding of Men’s Violence Prevention (MVP), which used both frameworks of Galtung applied on individual and systemic levels. Integrating these frameworks will explore the intricacies of violence, negative and positive peace, and transformation within the context of the study.

Figure 1

Integrated Violence Triangle and Peace-Work Model



Conceptual Framework

In the study of McInerney and colleagues (2023), both the Violence Triangle (VT) and Peace-Work Triangle (PWT) theories have been incorporated by identifying in which types of conflict men were involved, presenting the peace and negative peace in addressing the conflict, and adapted the three approaches of peace (Galtung, 1969)—peacekeeping, peacemaking, and peacebuilding. Galtung's (1969) concept of negative peace and positive peace is pivotal as it helps distinguish between the absence of violence and presence of justice, equality, and structural transformation. Moreover, studies also solely adapted VT with regard to violence in women and men (Sinha et al., 2017; McInerney et al., 2023). Adapting the conceptualization of Galtung's (1969) conflict of the triangle, this will be a social reflection of how a resident behaves in the community and how this contributes to how local authorities, such as barangay authorities, handle this type of case. Furthermore, this study conceptualized the Peace-Work Triangle (1969) as an approach to developing interventions and programs to prevent the violent behavior of the residents in the barangay. This approach has also been utilized by Carlson et al. (2015) and Casey et al. (2013) in strategizing how a program can be translated into actions that work well with the said perpetrators. Moreover, in the context of the study, the researchers do not limit the concept of peacekeeping to direct violence; hence, they interconnect it with peacemaking and peacebuilding.

Figure 2

Conceptual Framework of the Integrated Violence Triangle and Peace-Work Model

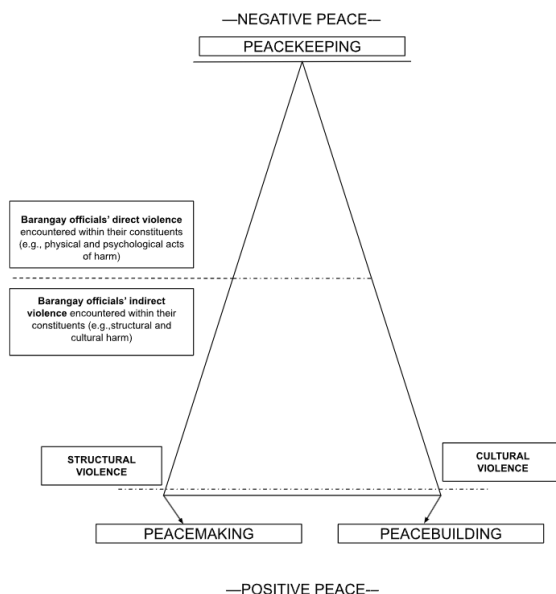


Table 1 presents an operational definition by applying Galtung’s violence triangle to men’s violence against women. The operating principles are the following: direct violence, structural, and cultural violence (Galtung, 1969). Additionally, the operational definitions are from the study of McInerney and Archer (2023).

Table 1

Operationalization of Galtung’s Violence Triangle

CONCEPTUAL LEVEL	OPERATIONAL LEVEL
Direct Violence	Manifestations and patterns of physical and emotional violence, such as domestic abuse, disputes over land, and youth aggression.
Structural Violence	Unequal access to essential services, employment opportunities Specific ways in which the residents make them more susceptible to being involved in illicit activities, contributing to community violence.
Cultural Violence	Harmful cultural norms experienced by the residents.

Tables 2 and 3 summarize the application of Galtung’s Peace and Peace-Work Triangle. Similar to Table 1, the operational definitions were adapted from the study of McInerney and Archer (2023).

Table 2

Operationalization of Galtung’s Positive and Negative Peace

CONCEPTUAL LEVEL	OPERATIONAL LEVEL
Negative Peace	Absence of direct violence (physical, emotional, psychological) and the prevention of violence in the barangay community.
Positive Peace	Addressing structural factors through the collective actions within the barangay community

Table 3

Operationalization of Galtung’s Peace-Work Triangle

CONCEPTUAL LEVEL	OPERATIONAL LEVEL
Peacekeeping	Involves how barangay officials respond to moments of violence.
Peacemaking	Involves diplomatic negotiations; how barangay officials address and create resolution through reconciliation of both parties.
Peacebuilding	Involves how barangay officials seek to address the root cause of violence by incorporating approaches and strategies.

METHODOLOGY

The study utilized a qualitative research approach to identify the types of conflicts that commonly arise within Barangay Nagbunga and explore how peace communication manifests and contributes to conflict resolution and community cohesion in the said barangay. Grounded in an interpretivist paradigm, the researchers sought to understand the phenomenon through the perspectives of the volunteer informants who are the barangay officials in Barangay Nagbunga. These officials were the barangay chairperson, one of the barangay councilors, the *chief tanod*, and one member of the *Lupong Tagapamayapa*. The qualifications of the key informants, each with at least 1 year of experience in their respective roles, are significant in smaller, closely-knit communities like Barangay Nagbunga. In such settings, even a year of active service already provides them with a substantial amount of exposure to the community's dynamics, conflicts, and resolution processes.

Moreover, the researchers conducted in-depth interviews with the said officials. In doing so, the researchers employed a research instrument in curating and collecting their responses. In the form of an interview guide, a series of structured questions were divided into four sections, each aligned with the study's objectives. First, the informants' were asked to provide socio-economic data about the barangay, including a) the total population of the barangay, b) the breakdown of residents by income groups (low, middle, high), c) the predominant age group (youth, adults, senior citizens), and d) the common types of employment held by residents. Second, the questions focused on identifying the types of conflicts that commonly arise within the barangay. Third, the interview guide examines the communication strategies and peacekeeping efforts employed by barangay officials. Finally, the informants' were asked about their challenges and actionable recommendations for improving peace communication efforts. Such questions were aimed to gather valuable insights for enhancing peace and conflict resolution initiatives at the barangay level.

Following data collection, the researchers used thematic analysis on the collected data, enabling them to categorize and assign labels to the observed themes. The transcripts utilized open coding. The utilization of open coding facilitated the identification of themes that arose from the collected data (Kandiko & Mawer, 2013). Following the open coding, the researchers then used axial coding. Axial coding rebuilds the data by establishing connections between the codes (Kendall, 1999).

Barangay Nagbunga was deliberately selected as the study's locale because it epitomizes the socio-economic and cultural dynamics often present in grassroots governance in the Philippines. As a barangay characterized by poverty and diverse community composition, including residents from Hanjin Village who were displaced following the bankruptcy of Hanjin

Shipping Company, it provides a rich context for examining conflicts rooted in structural and cultural factors. The unique challenges faced by Barangay Nagbunga, such as its historical land disputes and economic hardships, make it an ideal microcosm for understanding the interplay of violence and peace communication within a community. Moreover, the barangay's experiences can serve as a case study for other similarly situated communities, highlighting the importance of addressing localized conflicts through innovative and participatory approaches in governance.

The informants of the study participated on a voluntary basis. They were informed about the study's premise and their practical contribution to the study. Additionally, they were also informed of their right to withdraw and right to refuse to answer any questions at any given time. To maintain their confidentiality and anonymity, pseudonyms were randomly assigned. Moreover, to address the potential conflict of interest arising from the familial relationship between one of the researchers and one of the informants, strict measures were implemented to ensure the integrity and objectivity of the study. The researcher with the familial connection was excluded from all stages of data collection, including interviews, to prevent any undue influence on the responses of the informants. Additionally, this researcher did not participate in the initial data coding process to minimize the possibility of bias in interpreting the data. These measures ensured that the collected data was independently analyzed by the other researchers, adhering to ethical research standards. Furthermore, a clear disclosure of the familial relationship was provided in the study to promote transparency and uphold the credibility of the research process.

This qualitative research is a collaborative effort between researchers of Bachelor of Arts in Communication Research students of the College of Mass Communication at the University of the Philippines Diliman. The research inquiry reflects their research interest in political communication as both researchers are captivated by the recent 2023 Philippine barangay and Sangguniang Kabataan elections.

FINDINGS AND DISCUSSION

The researchers interviewed four barangay officials residing in Barangay Nagbunga, Castillejos, Zambales. This consists of *Barangay Captain*, *Barangay Kagawad*, *Member of Lupon Tagapamayapa*, and *Chief Tanod*. All of the informants' roles are significantly associated with the peace and order of the barangay. Two of the informants were part of the Peace and Order Committee, indicating their direct involvement in ensuring the overall safety and well-being of the residents.

¹*Conflicts of interest can lead to preconceived notions and biases or otherwise impact the thoughts and actions of researchers and informants (Horner & Minifie, 2011).*

The analysis of these interviews focuses on identifying the violence they have encountered within their barangay, the difficulties encountered in peace communication, and how they strategize peace communication in facilitating and resolving conflicts.

Direct Violence

Locked in Fear: Domestic Abuse within Family Members

Almost all of the informants expressed that the most frequent reports that they have received in Barangay Nagbunga concerning violence revolve around the domestic household. This equates to physical abuse towards their partner and children, as the Informant 1 mentioned:

So, I was in charge of the Violence Against Women and their Children (VAWC) committee. There are reported cases of domestic abuse—abuse towards their partners. I also have cases where the husband or wife is abusing their child.

This stems from miscommunication and the inability to control their anger, turning to physical violence, including “*pananampal*,” whether to their partner or their children. However, Informant 1 affirmed that this form of direct violence is not highly prevalent in their barangay. Additionally, Informant 1 also mentioned that during his previous term as a part of the Violence Against Women Committee (VAWC), he handled this type of violence in two to three cases a month, implying that it is not entirely absent in the barangay.

Contrary to the expectations, while this violence is dominant to women, as emphasized by Informant 3, he also reiterates that he receives reports from men that their wives or partners are abusing them.

This intertwines with the study of McInerney et al. (2023), who adapted Galtung’s theory of conflict, highlighting that domestic abuse is a form of direct violence. Furthermore, as stated by Galtung, violence can escalate to further violent actions, implying that, in the context of this finding, this violence may be fueled by indirect violence: structural violence. This extends beyond the notion that there is a part of a broader spectrum of violence where “men” are typically the perpetrators of domestic violence, leaving women and children in abusive situations. Interestingly, feminist scholars have challenged the conventional view of Galtung’s work, “Violence, Peace and Peace Studies” (1969), wherein these scholars zoom this lens into structural violence influenced by the power dynamics between men and women into peace theories (Sinha et al., 2017; Cross, 2013; Confortini, 2007), unlike Galtung, who primarily categorizes Violence Against Women (VAW) as direct violence.

By bringing up issues related to gender, it challenges the stereotype that primary perpetrators of domestic violence have always been men, having failed to observe that women can also be aggressors, which has been observed in this finding, connecting the interconnectedness of direct and indirect violence.

Domestic violence and land disputes all boil down to negative peace—while there might be a visible absence of direct violence, the root causes of conflicts persist. In Barangay governance, this involves maintaining peace through practical measures that stop immediate acts of violence, crime, and other forms of direct harm. As also acknowledged, structural violence is determined as a contributing factor; the primary emphasis remains on the reduction of direct violence within the household.

Indirect Violence

Survival through Desperation: The reality of Structural Violence in Hanjin Village

In Hanjin Village, part of Barangay Nagbunga, the impact of structural violence is starkly evident. The village's residents, grappling with the lack of economic opportunities and resources, are forced into extreme actions to ensure their survival. This scenario is exemplified by the actions of some individuals who, driven by hunger, resort to dismantling abandoned houses to extract and sell copper from electrical installations. This desperate measure to secure a means of sustenance highlights the acute poverty and resource scarcity faced by the community. Informant 1 described the situation by stating:

When a person truly has nothing at all, they become hungry and look for ways to solve it. They find a solution to eat. There comes a point where they dismantle the vacant houses in that village. They just take the electricity, the installation of that house, that small unit. They dismantle the electrical wiring. Then they strip the wiring. They just take the copper. They will indeed sell that copper at the junk shop.

It becomes clear that the conditions in Hanjin Village are a practical manifestation of the structural violence discussed by Galtung (1990). This is also evident in systemic failures such as structural unemployment that have created an environment of extreme deprivation. Structural unemployment occurs when there is a long-term decline in certain sectors of the economy because they lack the necessary skills or their industry has shifted or declined. The bankruptcy of the shipping company in 2017 led to the sudden loss of jobs for many in the village and the broader decline of the industry—residents who lacked the necessary skills had a hard time transitioning to new forms of employment. These long-term unemployment and lack

of resources contribute to chronic poverty in Hanjin Village—where the absence of necessities like food compels residents to engage in potentially risky and destructive behaviors. These actions, born out of necessity, reflect the systemic failures that perpetuate poverty and hinder individuals from achieving a decent standard of living. Therefore, understanding and mitigating structural violence in communities like Barangay Nagbunga requires a holistic approach that addresses the root causes of economic and social disparities, as Galtung’s theory suggests (Galtung, 1990).

Land Struggles: Continuous Cycle of Land Dispute and Structural Injustices

Half of the informants mentioned that land dispute has always been an ongoing conflict in Barangay Nagbunga, specifically in Barangay Proper. This is rooted in historical injustices, conflict over the inheritance of property, boundary disputes, and illegal land transactions. As asserted by Informant 1:

That is the usual problem here in the area—Barangay Proper—the land dispute. Until now, the conflicts about land grabbing have been circulating for years. Their dispute over land, as well as the right of way.

In Barangay Proper, families frequently engage in land disputes, resulting in disagreements on how to divide or manage the inherited property. Moreover, there are also conflicting interests and differing views with regard to the best use of property. Viewing the situation through the lens of structural violence, as conceptualized by Galtung (1990), some groups are hindered from accessing the opportunities and resources to meet their basic needs. This includes land disputes and rights of way, wherein powerful actors such as government authorities or wealthy individuals have greater control over resources, further enriching structural violence. This abuse deprives the rights of marginalized groups of fair opportunities and traps them into a cycle of social injustices, which can then escalate into physical violence.

Community Dynamics: Incompatible Beliefs and Cultural Discord

Half of the informants gave insightful background information into the unique social and cultural landscape of Barangay Nagbunga, which is crucial for understanding the types of conflicts that arise within this community. The Hanjin Village of Barangay Nagbunga is depicted as a “melting pot” of various Filipino cultures, unlike the main proper area of the barangay that is predominantly inhabited by a single ethnic group, like Ilocanos. Barangay Nagbunga presents a diverse cultural tapestry. It includes people from different regions of the Philippines and even specific ethnic groups like the Ifugao. This diversity is likened to a “cultural exodus,” where various cultural groups have converged, bringing with them their

unique customs, traditions, and ways of life.

This amalgamation of cultures significantly influences the residents' character and behavior (*ugali*). Unlike a homogeneous community in the main proper of Barangay Nagbunga, the norms, and lifestyle in the Hanjin Village of Barangay Nagbunga are shaped by a variety of cultural influences. This diversity, while enriching, also brings its own set of challenges.

Conflicts within Barangay Nagbunga primarily stem from these cultural differences. Despite the shared national identity as Filipinos, the variance in regional behaviors and practices leads to misunderstandings and disagreements among the residents. These conflicts are particularly pronounced in areas such as financial matters, where cultural approaches to money management and economic priorities may differ significantly.

Cultural clashes in financial behavior often stem from deep-rooted beliefs and practices that individuals bring from their regional backgrounds. For example, some cultures may prioritize saving and investment for future security, while others might focus on immediate family needs or social obligations, leading to differing approaches to spending, saving, and investing. These differences can result in conflicts when community members interact and make collective decisions related to economic activities or community resources.

Informant 2 noted that these cultural differences make it challenging for residents to find common ground. This difficulty in achieving harmony is a key factor in the emergence of various issues within the community. These observations are based on personal insights, highlighting the need for a deeper, perhaps more structured, analysis to understand and address the conflicts in Barangay Nagbunga fully. He stated:

So, there are many conflicts which led to quite a few issues being produced there, especially, that, when it comes to money. That's just my observation. Because it's also hard to agree, there are cultural differences, say we're Filipino, the attitudes are different, like that, which leads to some issues among those neighborhoods in Hanjin Village.

Bellish (2015) emphasized the role of beliefs in causing conflict. Beliefs, often ingrained and linked to identity, can be powerful motivators for behavior and perspectives. In Barangay Nagbunga, the amalgamation of various Filipino cultures, each with distinct beliefs and practices, sets the stage for conflict. When beliefs tied to cultural identity, such as those regarding family structures, financial management, or social interactions, clash, it creates tension. This emphasizes the idea that while beliefs are a fundamental part of cultural diversity, they can also be a source of discord,

especially in a community characterized by a diverse cultural mosaic like Barangay Nagbunga.

Falcone et al. (2023) highlighted the importance of communication, understanding, and conflict-resolution skills in managing differences. In a community like Barangay Nagbunga, where cultural diversity is a given, developing these skills is crucial. Acknowledging and respecting differences, seeking common ground, and effective communication can help manage and resolve conflicts (Falcone et al., 2023).

The conflicts in Barangay Nagbunga, rooted in incompatible beliefs, reflect a microcosm of larger global trends. They indicate the importance of cultural sensitivity and the need for skills in conflict resolution. Furthermore, they highlight the need for community initiatives that foster understanding and respect for diverse cultural perspectives, which could be instrumental in transforming these conflicts from points of contention into opportunities for communal growth and enrichment. Understanding and embracing this diversity, while challenging, could turn Barangay Nagbunga into a model of multicultural coexistence and harmony.

On the Way: Negotiating, Compromising, Collaborating

Among all the informants, collaborating with law enforcement agencies is one of their communication strategies for promoting peace and resolving conflicts in Barangay Nagbunga. They usually collaborate with the Philippine National Police (PNP), the Department of the Interior and Local Government (DILG), and the Department of Social Welfare and Development (DSWD). As also emphasized by Informant 4, this collaborative effort involves open dialogues and discussing community concerns when de-escalating situations. This response to moments of violence reflects the peacekeeping aspect of Galtung's (date) Peace Work Triangle.

For instance, Informant 3 mentioned the importance of coordination and commitment between them as barangay officials and law enforcement agencies. Not only that, but he further added:

Law enforcement agencies hold orientations and seminars, and sometimes, we are the ones who also initiate the conduct of those sessions. The attendees are residents and barangay officials on how to eliminate these kinds of conflicts and issues arising in Barangay Nagbunga.

As highlighted by Carter et al. (2011), communications strategies underscore the pivotal role of public officials, wherein they have the potential to facilitate public trust and drive the engagement of the residents to be part of the solution. This partnership with law enforcement agencies manifests how leadership communication influences the low rate of violence cases

reported within the Barangay Nagbunga. Informant 3 also mentioned that before having to partner with the law enforcement agencies, they do “cross-examination” to see the other side of the story, ensuring that this kind of communication strategy will make them understand their perspective individually: maintaining a balance between both parties. Moreover, if the barangay officials cannot handle these cases, they will be turned over to law enforcement agencies.

This collaborative effort shows how Barangay Nagbunga has a strong partnership between local authorities and law enforcement to ensure the welfare of the residents in the corresponding lines to peacemaking, peacekeeping, and peacebuilding (Galtung, 1969; Mclinear et al., 2023).

All these manifest through the process of collaboration with law enforcement agencies, from having open dialogues to having mutually agreed upon solutions to building an effective response not only to immediate conflicts but also to discovering the root cause of the violence. Notably, in peacekeeping, particularly those perpetrators having weapons, collaboration between the agencies prevents the escalation of the violence. This also shows the interconnectedness of the three approaches to peace, highlighting that peacekeeping can also be applied and adaptable to a broader understanding of violence, including indirect forms.

Leading the Unwilling in the Barangay Nagbunga

Most informants narrated and cited multiple challenges, and the root cause of these challenges points to the uncooperativeness of their constituents. Informants noted that many residents were hesitant to participate in barangay-led dispute resolution processes, often failing to attend meetings or openly engaging in discussions. These challenges are not unique to Barangay Nagbunga but are reflective of broader issues faced by local governance units in managing community conflicts. Informant 2 addresses the issue of non-participation or partial participation in conflict resolution processes, stating:

The difficulties often arise from the involvement of the parties concerned. Sometimes, they do not cooperate, or if only one party shows up, it becomes harder to resolve the situation—no show. So, it is most likely a waste of time for both the complainants and the barangay officials.

A common difficulty barangay officials face is the lack of cooperation from involved parties. When one or more parties fail to show up for meetings or discussions, it becomes nearly impossible to resolve the conflict effectively. This non-attendance not only stalls the resolution process but also wastes the time and resources of the complainants and the local dispute resolution body (often referred to as the “lupon”). Moreover, Informant 4 sheds light on another challenge: dealing with individuals who

are under the influence of alcohol and are uncooperative or disruptive. The approach described involves formally recording the incident (blottering) and involving family members in the resolution process. In more severe cases, such as non-compliance or aggressive behavior, barangay officials may resort to involving the police and detaining the individual. This challenge underscores the complexities barangay officials face when dealing with individuals who are not in a state to participate rationally in conflict resolution processes. The need for a multi-faceted approach, involving both community and law enforcement resources, becomes apparent in such situations.

The absence of full participation highlights a crucial aspect of peace communication: the need for all involved parties to be actively engaged and committed to the process. Without this commitment, efforts by barangay officials can become futile. This hesitancy can largely be attributed to a lack of trust in the BJS, which is critical to fostering meaningful participation (Falcone et al., 2023).

Trust-building emerges as an indispensable component in addressing these participation challenges. Building trust between barangay officials and their constituents can help alleviate feelings of skepticism or fear of bias in the resolution process. Kosfeld (2020) argues that trust fosters transparency, encourages dialogue, and strengthens residents' confidence in institutional mechanisms. In the barangay context, this can be achieved by ensuring consistency and impartiality in the handling of disputes, openly communicating the objectives and processes of the BJS, and creating safe spaces for dialogue. For example, barangay officials can employ participatory approaches, such as inviting both parties of a dispute to co-develop resolutions or seek feedback from residents on proposed peacebuilding strategies. Additionally, cultural sensitivity and recognition of diverse community perspectives, especially in areas like Barangay Nagbunga where cultural differences abound, are pivotal in building rapport and understanding with constituents. Such efforts not only empower individuals to voice their concerns but also engender a sense of ownership over conflict resolution outcomes, leading to greater cooperation (Lopez, 2009).

The success of peace communication initiatives depends significantly on the active participation and cooperation of community members. Moreover, it requires barangay officials to be adaptable and resourceful in handling various types of conflicts, including those involving uncooperative or impaired individuals. Trust-building serves as a bridge that connects barangay officials with residents, transforming the justice system from a mere administrative mechanism into a collaborative process grounded in mutual respect and accountability. By fostering trust, barangay officials can address the deeper socio-cultural barriers that hinder participation, ensuring that the justice system is both inclusive and effective in resolving conflicts. Building a culture of respect, responsibility, and active

participation among community members can significantly aid barangay officials in their peace communication efforts.

Furthermore, De Asis et al. (2020) delved into the effectiveness of barangay officials, particularly *Barangay Tanods*, in maintaining peace and order. Their study provided empirical evidence on the challenges and obstacles faced by these local officials in fulfilling their roles by citing that uncooperative members of the community are one of their problems. However, it is not just about having the authority but also about being perceived as fair and unbiased mediators. Officials need to be seen as allies by all community members, which requires continuous engagement and transparency in their actions.

That being said, all these systemic issues mentioned above are clear indicators of structural violence, which prevents individuals from meeting their basic needs and securing a dignified life. As Galtung (1969) emphasizes—in order to achieve positive peace—it needs to address structural violence. Barangay Nagbunga's efforts to foster peace aligns with the principles of positive peace emphasizing not only the absence of violence, but the presence of justice and equity through the initiatives of the Barangay officials. By mediating conflicts, promoting economic opportunities, and addressing cultural tensions, the barangay directly tackles the root causes of inequality and justice—ensuring that the community moves toward a state of positive peace.

Integrating these insights, it becomes clear that effective peace communication in Barangay Nagbunga requires a multifaceted approach. Building trust within the community, understanding and respecting cultural differences, and providing adequate resources and support to barangay officials are key elements in overcoming these challenges. Additionally, educating the community about the importance of participation and cooperation in peace initiatives could also be beneficial. Furthermore, equipping barangay officials with the necessary skills and resources, as well as fostering a collaborative relationship between community members and law enforcement, can create a more conducive environment for resolving conflicts effectively. The interplay of these factors indicates the complexity of governance at the local level and the importance of context-specific strategies in addressing community challenges.

CONCLUSION

Based on the analysis of the data gathered from barangay officials, the study identified several key types of conflicts prevalent in Barangay Nagbunga. These include domestic disputes, often involving physical and emotional abuse within families, and cultural conflicts arising from the diverse backgrounds of the residents. The melting pot nature of Barangay Nagbunga, particularly in the Hanjin Village, leads to clashes in beliefs and

practices, resulting in misunderstandings and disagreements in various aspects, such as financial matters and social interactions.

Furthermore, the lack of cooperation from community members in conflict resolution processes poses a significant challenge. Non-participation or partial participation of involved parties often leads to unresolved issues, wasting the efforts and resources of both complainants and the dispute resolution body.

These conflicts reflect the broader issues local governance units face in managing community dynamics. The effective resolution of these issues requires a multifaceted approach, including building trust within the community, understanding and respecting cultural differences, enhancing the skills and resources of barangay officials, and promoting active participation and cooperation among community members.

The study concludes that addressing these challenges is essential for maintaining peace and order in Barangay Nagbunga. The implementation of context-specific strategies, collaborative efforts with law enforcement, and fostering a culture of respect and responsibility are key to effectively managing the complexities of governance at the local level.

IMPLICATIONS AND RECOMMENDATIONS

Theoretical Implications and Recommendations

The study employed two frameworks of Johan Galtung's (1969) Conflict Theory, specifically the Violence Triangle and Peace-Work Triangle. Although it was explicitly stated by McInerney et al. (2023) that their study is not a "universal template," this still helped the researchers to align the interrelationships of barangays that encountered direct and indirect violence and outlined peace-communication strategies in addressing the types of conflicts and implementation of peacekeeping measures. By also adapting the concept of structural and cultural violence, this unveils the other root cause of conflict in society, as other theories solely focused on direct violence, limiting the other areas of the study. This zooms in not only to the individual behaviors but also encompasses the unjust structures and cultures happening within the society. The researcher further recommends that both Galtung's frameworks could be applied in gender studies, which has been proved by many academic scholars, emphasizing that all aspects of violence have relation to gender. Still, this framework can also transcend cultural and geographical boundaries. Moreover, the peacekeeping factor should not be limited to direct violence, as it also influences the process of indirect violence, aligning with peacemaking and peacebuilding.

Methodological Implications and Recommendations

The study effectively utilized a qualitative approach, particularly in-depth interviews, providing rich, detailed insights into the perspectives of barangay officials. Future studies might consider complementing this with quantitative methods for a more comprehensive understanding of community dynamics. Moreover, the use of thematic analysis was appropriate for identifying and categorizing themes related to peace communication. Researchers should continue to refine this method, incorporating software-based qualitative data analysis tools to enhance efficiency and accuracy.

The study navigated potential conflicts of interest well, especially considering the familial relationship between one researcher and a barangay official. Future studies should maintain this level of ethical vigilance, ensuring transparency and objectivity.

One key implication is the importance of a culturally sensitive approach in qualitative research, especially when dealing with diverse communities. The study's focus on local governance and peace communication in a specific barangay provided nuanced insights but also limited the generalizability of the findings. Future studies should consider expanding the research scope to include multiple barangays or regions for broader applicability. Furthermore, the study's focus on barangay officials offers valuable insights. However, it may also benefit from a broader participant base in future research, including residents and other stakeholders, for a more holistic understanding of community conflicts and resolutions.

Recommendations for future research include employing mixed methods to combine the depth of qualitative insights with the breadth of quantitative data. This could involve surveys or statistical analysis to complement the qualitative findings. Additionally, there is a need for more longitudinal studies to track changes over time, especially in rapidly evolving community dynamics and governance practices.

The study emphasizes the critical role of community participation and engagement in conflict resolution and peacekeeping initiatives. Future research should explore strategies to enhance community involvement and assess the long-term impact of such participation on peace and governance.

Lastly, given the dynamic nature of local governance and peace communication, continuous updates in research methodologies to adapt to changing social and political landscapes are recommended. This could involve integrating newer data collection and analysis technologies, like digital ethnography or social media analysis, to capture more contemporary forms of communication and interaction within communities.

Practical Implications and Recommendations

The findings of this study marks the critical need to enhance the Barangay Justice System (BJS) by addressing practical challenges that hinder its effectiveness. One major implication is the necessity of fostering trust and transparency between barangay officials and the community to increase participation in conflict resolution processes. Building trust requires barangay officials to demonstrate consistency, impartiality, and fairness in handling disputes. By addressing the socio-cultural and structural barriers to community engagement, such as skepticism or perceived bias, barangay officials can create an environment where constituents feel empowered to participate. This includes addressing cultural differences and ensuring that local voices are equitably represented in decision-making processes.

An essential component of this approach is the deliberate and structured integration of community communication into governance. Communication plays a pivotal role in bridging the divide between barangay officials and constituents, fostering understanding, and enhancing cooperation. To achieve this, barangay officials should prioritize creating platforms for regular community dialogues, consultations, and feedback sessions. These efforts can serve as avenues for transparency and inclusivity, providing constituents with opportunities to express concerns and contribute to the resolution process. Additionally, barangay officials can utilize local communication networks, such as radio, social media, or face-to-face assemblies, to disseminate information about the BJS. Providing information in local languages or dialects is crucial to ensuring that all members of the community, regardless of literacy level, can understand and participate meaningfully (Lopez, 2009).

Training programs on communication and conflict resolution are equally important. Barangay officials and members of the *Lupong Tagapamayapa* should undergo specialized training that emphasizes empathy, cultural sensitivity, and the use of non-adversarial communication methods. These programs can equip officials with the necessary skills to build trust and manage conflicts in diverse and complex community settings like Barangay Nagbunga. Trust-building, in particular, should be at the core of these initiatives, as it fosters a sense of community ownership over conflict resolution outcomes and empowers residents to take an active role in the BJS.

Furthermore, participatory approaches should be institutionalized to ensure that constituents are involved in shaping local policies and practices. Regular consultations with community members can strengthen collaboration and reinforce the legitimacy of barangay-led initiatives. Such participatory frameworks promote not only transparency and accountability but also mutual respect and understanding between barangay officials and their constituents. By involving the community at every stage of the

conflict resolution process, barangay officials can foster a more inclusive and effective justice system that addresses the unique needs of diverse populations.

As demonstrated in this study, effective communication serves as a catalyst for trust-building and collaboration, addressing the deeper socio-cultural barriers that hinder participation. Through transparent, inclusive, and culturally sensitive communication strategies, barangay officials can transform the barangay justice system into a dynamic, participatory institution. This transformation is essential for ensuring that conflicts are resolved not only fairly but also in ways that strengthen the social fabric of the community.

REFERENCES

- Acbay, J. J., Acbay, J. J., & Caila, J. M. Acabo, J. G. (2021). Dispute Resolution and its Effectiveness in the Municipality of Buenavista. *SMCC Higher Education Research Journal (Criminal Justice)*, 4(1), 1-1. <https://www.ejournals.ph/article.php?id=16590>
- Aglibot, J. R. (2023, March 10). *Displaced Hanjin Workers Fight Eviction from Housing Village in zambales town*. INQUIRER.net. <https://newsinfo.inquirer.net/1740625/displaced-hanjin-workers-fight-eviction-from-housing-village-in-zambales-town>
- An Act Providing for a Local Government Code of 1991, Rep. Act No. 7160, (1991) (Phil.), <https://www.officialgazette.gov.ph/1991/10/10/republic-act-no-7160/>
- Bellish, J. (2015, July 5). *Do beliefs cause conflict?*. One Earth Future. <https://oneearthfuture.org/en/news/do-beliefs-cause-conflict>
- Bienes, E. D. O., Müllen Jay, J., Kaicelyn Suganob, J. M., Alvarico, A. B., & Cuevas, J. F. (2022). Level of Effectiveness of the Barangay Peacekeeping Action Team in Relation to Public Safety and the Implementation of Curfew Hours as Perceived by 50th Barangay Residents. <https://mejast.com/data/uploads/87237.pdf>
- Boysillo, S. L. (2017). Governance of the Barangay Chairpersons in the Municipality of Ubay Bohol. *International Journal of Business and Management Studies*, 9(1), 50-63. <https://dergipark.org.tr/en/pub/ijbms/issue/36086/405193>
- Casey, E. A., Carlson, J., Fraguera-Rios, C., Kimball, E., Neugut, T. B., Tolman, R. M., & Edleson, J. L. (2013). Context, challenges, and tensions in global efforts to engage men in the prevention of violence against women: An ecological analysis. *Men and masculinities*, 16(2), 228-251.
- Casey, E. A., Masters, N. T., Beadnell, B., Wells, E. A., Morrison, D. M., & Hoppe, M. J. (2016). A latent class analysis of heterosexual young men's masculinities. *Archives of sexual behavior*, 45, 1039-1050.
- Confortini, C. C. (2006). GALTUNG, VIOLENCE, AND GENDER: THE CASE FOR A PEACE STUDIES/FEMINISM ALLIANCE. *Peace & Change*, 31(3), 333-367. <https://doi.org/10.1111/j.1468-0130.2006.00378.x>
- Cravo, T. (2017). Peacebuilding: Assumptions, practices and critiques. *Journal of International Relations*. <https://www.semanticscholar.org/paper/Peacebuilding%3A-assumptions%2C-practices-and-critiques-Cravo/f13005049a3a0b43df69c9c1bf97cfbdec3f7faa>
- Cross, K. (2013). *The gendered effects of structural violence* (SSRN Scholarly Paper 2300717). <https://papers.ssrn.com/abstract=2300717>
- De Asis, J., Malibong, J., Alquiza, C. M., & Tagulao, R. M. (2020). Effectiveness of Barangay Tanods on the Maintenance of Peace & Order

- in the Municipality of Bayambang. *Southeast Asian Journal of Science and Technology*, 5(1). <https://www.sajst.org/online/index.php/sajst/article/view/245>
- Dhir, R. (2023). *What is blue collar? definition and job examples*. Investopedia. <https://www.investopedia.com/terms/b/bluecollar.asp>
- Doquilla, F. L., Ayao-eo, S. P., & Almerol, P. M. (2023). Barangay Peacekeeping Action Team Of Selected Barangays Of Cabanatuan City, Nueva Ecija. *EPRA International Journal of Multidisciplinary Research (IJMR)*, 9(1), 272-277. <https://www.eprajournals.net/index.php/IJMR/article/view/1432>
- Falcone, L., Fogle, N., & Ollendyke, D. (2023, April 17). *Dealing with conflict*2023. Penn State Extension. <https://extension.psu.edu/dealing-with-conflict>
- Galtung, J. (1990). Cultural violence. *Journal of Peace Research*, 27(3), 291–305. <https://doi.org/10.1177/0022343390027003005>
- Galtung, J. (1996). *Peace by peaceful means: Peace and conflict, development and civilization*. Sage Publications, Inc.
- Gay, W. C. (2008). Language of war and peace, the. *Encyclopedia of Violence, Peace, & Conflict*, 1115-1127. <https://doi.org/10.1016/b978-012373985-8.00093-3>
- Gupit, E. F. E., & Cuevas Jr, J. F. (2022). Assessment of Barangay Peacekeeping Action Team's Performance During Covid-19 Pandemic in Ozamiz City. *Assessment*, 5(2), 178-189.
- Horner, J., & Minifie, F. D. (2011). Research ethics III: Publication practices and authorship, conflicts of interest, and research misconduct. [https://doi.org/10.1044/1092-4388\(2010/09-0263\)](https://doi.org/10.1044/1092-4388(2010/09-0263))
- Huntington, S. (1993, June 1). *The Clash of Civilizations?*. Foreign Affairs. <https://www.foreignaffairs.com/articles/united-states/1993-06-01/clash-civilizations>
- Jacinto, A., Diamante, L. A., Tamano, A., Abrahan, R., Nacionales, J., & Claridad, N. (2023). Barangay chairperson's competence of oral communication skills in resolving conflicts in the Philippines. *Journal of Language and Pragmatics Studies*, 2(3), 198-209. <https://doi.org/10.58881/jlps.v2i3.20>
- Kandiko, C. B., & Mawer, M. (2013). Student expectations and perceptions of higher education. *London: King's Learning Institute*, 1-82. https://kclpure.kcl.ac.uk/ws/portalfiles/portal/58541527/QAA_Student_Expectations_and_Perceptions_Final_Report.pdf
- Kaufman, A. (2014). Thinking beyond direct violence. *International Journal of Middle East Studies*, 46(2), 441–444. <https://doi.org/10.1017/S0020743814000427>
- Kendall, J. (1999). Axial coding and the grounded theory controversy. *Western Journal of Nursing Research*, 21(6), 743-757. <https://doi.org/10.1177/019394599902100603>

- Kendall, S. H. (1976). The barangay as community in the Philippines. *Ekistics*, 15-19. <https://www.jstor.org/stable/43618621>
- Kosfeld, M. (2020). The role of leaders in inducing and maintaining cooperation: The CC strategy. *The Leadership Quarterly*, 31(3), 101292. <https://doi.org/10.1016/j.leaqua.2019.04.002>
- Laroza, Jonah Marich A., Glesiel Joy A. Tacogdoy, Harley B. Cambal, John Jameson E. Page, Bernaflor B. Canape, and Jose F. Cuevas Jr. "Performance-Based Assessment of the Barangay Peacekeeping Action Team During Covid-19 Pandemic in Ozamiz City." (2022). <https://www.academia.edu/download/89239295/87234.pdf>
- Lopez, M. G. (2009). The poor on trial in the Philippine criminal justice system. *Kasarinlan: Philippine Journal of Third World Studies*, 14(3). <https://www.journals.upd.edu.ph/index.php/kasarinlan/article/view/1424>
- Manding, J. C. (2020, January 1). *Competency of barangay officials for good governance*. University of Cagayan Valley. https://www.academia.edu/95642940/COMPETENCY_OF_BARANGAY_OFFICIALS_FOR_GOOD_GOVERNANCE
- McInerney, W. W., & Archer, D. T. (2023). Men's violence prevention and peace education: Drawing on galtung to explore the plurality of violence(S), peace(S), and masculinities. *Men and Masculinities*, 26(1), 69–90. <https://doi.org/10.1177/1097184X221149989>
- Metillo, E. J., Ello, A. C., Rone, M., Danganan, L. F., & Cuevas, J. (2022). The Tales of Barangay Officials in Resolving Community Disputes. *Middle East Journal of Applied Science & Technology*, 5(2). <https://www.semanticscholar.org/paper/The-Tales-of-Barangay-Officials-in-Resolving-Metillo-Ello/27e41d2fc69b63fb3a6362d38dd5f29ffaf0b9f2>
- Mohammed, M. P., & Caingat, N. C. (2017). Barangay Justice System in Barangay Matatalaib, Tarlac City: An Evaluation. *Voice of Research*, 72. <https://ideas.repec.org/p/vor/issues/2017-03-21.html>
- Orenze, H. P., Coballes, J. D., & Ferrer, O. G. (2021). Performance of barangay peacekeeping action teams of Buguey Cagayan. *International Journal of Advanced Research in Management and Social Sciences*, 10(2), 45-63.
- Porio, E., and Roque-Sarmiento, E. (2019). "Barangay." In Orum, A. (ed) *The Wiley Blackwell Encyclopedia of Urban and Regional Studies*. John Wiley & Sons Ltd., New Jersey. <https://doi.org/10.1002/9781118568446.eurs0016>
- Rojo, S. (2002). The barangay justice system in the Philippines: Is it an effective alternative to improve access to justice for disadvantaged people. *University of Sussex*. <https://api.semanticscholar.org/CorpusID:201726013>
- Shields, P. M. (2017). Limits of negative peace, faces of positive peace.

- The US Army War College Quarterly: Parameters*, 47(3). <https://doi.org/10.55540/0031-1723.2868>
- Sinha, P., Gupta, U., Singh, J., & Srivastava, A. (2017). Structural violence on women: An impediment to women empowerment. *Indian Journal of Community Medicine : Official Publication of Indian Association of Preventive & Social Medicine*, 42(3), 134– 137. https://doi.org/10.4103/ijcm.IJCM_276_15
- Udanga, G. E., & Cuevas, A. (2023). Assessing Government Service Delivery in Barangay Pili, Mogpog, Marinduque: A Resident Satisfaction Survey. <https://cognizancejournal.com/vol3issue7/V3I732.pdf>
- Vorobej, M. (2008). Structural violence. *Peace Research*, 40(2), 84–98. <https://www.jstor.org/stable/23607799>
- Ybañez, J. (2013). *Tibaldo: Settlement of conflicts in the Barangay (1st of two parts)*. SunStar Publishing Inc. <https://www.sunstar.com.ph/more-articles/tibaldo-settlement-of-conflicts-in-the-barangay-1st-of-two-parts>

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Diagnosing the Philippine Infodemic: Content Analysis of Rappler's Science and Health Fact-Checks, 2020-2023

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ABSTRACT

Much Philippine disinformation research has focused on electoral fake news. Equally important to scrutinize is the infodemic that has plagued the country even before the COVID-19 pandemic. This study explored the role of fact-checking in combating the infodemic during the height of pandemic by content analyzing 435 science and health-related fact-checks published between January 2020 and July 2023 by Rappler, one of the leading fact-checking news agencies in the Asia-Pacific region and a signatory of the International Fact-Checking Network (IFCN). The findings reveal the following: Rappler fact-checked not only COVID-19 claims but also broader health and science issues; fact-checking peaked in early 2020, coinciding with the pandemic's onset, and gradually declined as recovery progressed; Facebook emerged as the primary platform where fact-checking was done; fact-checks were presented in both English and Filipino and were rated as either *false* and *missing context*; volunteers and citizen journalists were involved in fact-checking; predominant types of claims included hoaxes, pseudoscience, and false policies; propaganda-related claims mainly involved Rodrigo Duterte as the source and Leni Robredo as the target; and Rappler employed a triangulation method, using both primary and secondary sources to verify claims. The study underscores the importance of continuing science and health fact-checking efforts beyond the pandemic and recommends addressing the root causes of the infodemic, particularly by identifying the architects of health and science disinformation. These findings have implications for enhancing fact-checking practices and understanding the dynamics of the infodemic in the Philippines.

Keywords: *information disorder, science journalism, disinformation studies, fake news, media and information literacy*

INTRODUCTION

Infodemic in the Philippines

The Philippines has endured a public health information crisis long before the COVID-19 pandemic (Lasco & Yu, 2021; Yu, Lasco, & David, 2021). In 2016, Dengvaxia, a vaccine designed to prevent dengue fever, was hailed as a medical breakthrough. The government launched a massive immunization campaign targeting over 800,000 school children. But what began as a promising public health initiative quickly spiraled into chaos. In November 2017, Dengvaxia's developer, Sanofi Pasteur, released a report claiming that their vaccine might cause severe illness in those who had not previously contracted dengue, sparking public outcry. Media outlets, politicians, and social media influencers pounced on the issue. This was exacerbated by reports of several deaths of vaccinated children, whose families claimed that Dengvaxia was the cause. However, investigations conducted by the Philippine General Hospital (PGH) concluded that there was no scientific proof that the vaccine caused the deaths of the children (University of the Philippines, 2018). Soon, the narrative shifted from cautious concern to outright panic as a cacophony of voices subverted the scientific authority of PGH.

By 2018, the country saw a resurgence of measles and polio, diseases long thought to be under control, as well as an outbreak of pertussis or whooping cough, as parents refused to vaccinate their children out of fear (UNICEF.org, 2024). This mistrust persisted into the COVID-19 pandemic, complicating efforts to curb the virus. Vaccine hesitancy slowed down recovery efforts, contributing to higher infection rates and more deaths. The Dengvaxia debacle revealed the powerful, dangerous consequences of misinformation, highlighting the urgent need to understand and address the infodemic, defined as the overabundance of information, both accurate and false, that makes it difficult for individuals to find trustworthy sources and reliable guidance (Zielinski, 2021). This infodemic adds a significant layer of complexity to public health efforts.

Many thinkers likewise have theorized this phenomenon, which has been christened with more specific names such as "disinfodemic" (Posetti & Bontcheva, 2020A), which is defined as "COVID-19 disinformation that confusion about medical science with immediate impact on every person on the planet, and upon whole societies. It is more toxic and more deadly than disinformation about other subjects. (p.2)"

Wardle & Derakhshan (2017) have also explored the notion of "information disorder," which has three types, namely misinformation, disinformation, and malinformation. These concepts are commonly tackled in fact-checking and media and information literacy campaigns. Misinformation is false or inaccurate information shared without the intent

to deceive. People often spread misinformation unknowingly, such as sharing incorrect health advice or outdated news, believing it to be true. Disinformation, on the other hand, is intentionally false information spread to mislead or manipulate. Its goal is often to create confusion or push certain political or ideological agendas.

For example, during elections or public health crises, bad actors may deliberately circulate fake news or deceptive claims to sway public opinion. Malinformation involves the use of true information with the intent to cause harm. While the content itself is accurate, it is weaponized to damage reputations, invade privacy, or incite conflict. An example would be leaking private emails or sensitive data to discredit someone or cause distress. The critical difference lies in intent: misinformation is unintentional, disinformation is deliberate deception, and malinformation uses truth to harm.

In relation to this, Kandel (2020) had even enumerated the symptoms of this information disorder and how to manage it. Monsees (2023), in a study involving the US, Germany, and Czechia, pointed out the ill effects of fake news and its profound impact on democracy around the world, tarnishing the ability of citizens to think critically.

Then there is “infodemiology” (Zielinski, 2021), which is the study of the spread and impact of health-related information, particularly during public health crises. It combines “information” and “epidemiology” to understand how misinformation, disinformation, and accurate information circulate, especially online, and how they affect public behavior and health outcomes. By analyzing patterns of information dissemination, infodemiology aims to identify, track, and mitigate the harmful effects of false information, helping to improve public health strategies, communication efforts, and policy responses during infodemics, such as the one experienced during the COVID-19 pandemic.

However, much of the existing literature on the infodemic has been centered on first-world, Western realities, where digital infrastructure and media landscapes are vastly different from those in developing nations. Studies from the United States, Europe, and other highly industrialized countries often focus on the role of social media platforms like Facebook and X in spreading dubious claims, examining their influence within relatively high-literacy, high-access populations. These studies also explore the effects of misinformation on public health campaigns, typically in environments where regulatory measures, media literacy programs, and public trust in institutions are relatively strong, or at least, more developed. As a result, the insights and interventions derived from these contexts may not always translate effectively to countries in the Global South.

In contrast, the infodemic situation in nations within the Asia-Pacific region—particularly those in the Global South, like the Philippines—

remains under-explored. These countries face unique challenges, including limited digital literacy, fragmented media ecosystems, and varying levels of public trust in government and media institutions (Yu, Lasco, & David, 2021; Samonte et al., 2020). Moreover, these regions often lack the robust regulatory frameworks and fact-checking infrastructures available in wealthier countries. While the infodemic has become a global phenomenon, the conditions under which misinformation spreads and its impact on public health are likely to differ in the Global South, where access to reliable information is often compromised by socioeconomic factors, and where misinformation can have more direct, immediate consequences.

The Philippines, with its high social media penetration, is particularly vulnerable to the, as revealed by one Philippine study on fake news susceptibility among youth voters (Deinla et al., 2021). Understanding the infodemic in the Philippine context requires exploring the country's experience with information disorder during the pandemic and beyond.

By focusing on the realities in countries like the Philippines, researchers and policymakers can develop more inclusive strategies for managing future infodemics that are grounded in the diverse social, cultural, and economic landscapes of the Asia-Pacific region.

Fact-check Monitoring in the Philippines

To mitigate the effects of the infodemic, monitoring and fact-checking initiatives have become essential tools (WHO, 2021; Samonte et al., 2020; Posetti & Bontcheva, 2020B). The WHO, in many of its policy briefs, has emphasized the importance of these efforts in managing the spread of misinformation. Fact-checking organizations, like Rappler in the Philippines, play a vital role in curbing the influence of misinformation by providing the public with verified, accurate information. The generation of fact-checking data, in particular, is seen as an important asset in understanding how misinformation spreads and how best to counter it. The analysis of this data can help inform future efforts to combat disinformation and guide policy measures to improve public health communication.

By systematically analyzing the content of fact-checks, especially in the context of science and health-related misinformation during the COVID-19 pandemic, researchers can better understand the mechanisms that drive the spread of misinformation. This data can also support more targeted infodemic management strategies, including educational campaigns and policy interventions aimed at reducing misinformation's harmful impacts on public health.

Despite the growing global recognition of the infodemic, there remains a significant gap in research focusing on fact-check monitoring. Most existing studies explore the spread of misinformation or its effects

on public opinion and health behaviors, but few delve into the systematic monitoring and evaluation of fact-checking efforts themselves. This is a crucial oversight, given that fact-checking serves as a primary line of defense against the infodemic. Without sufficient research into the effectiveness and reach of fact-checks, it becomes difficult to assess how well these interventions are curbing misinformation and protecting public health. Fact-check monitoring studies are critical for understanding not just the volume of misinformation but also how effectively it is being countered across different media ecosystems and populations. Understanding the nature of fact-checks—what claims are being debunked, how frequently, and on which platforms—provides valuable insight into the patterns of misinformation and helps fine-tune future strategies.

Only one Philippine fact-check monitoring study was found, which was conducted by Chua and Soriano (2020), involving the content analysis of fact-checks produced by member agencies of Tsek.ph, a fact-checking coalition that was formed for the 2019 Philippine General Elections. This is one of the main take off points of the current study, which adopted some of the content analysis measures in the study, such as the medium and platform where false claims were made, the sources and targets of such claims, the forms they took, and how they were rated by the agencies.

Another study employing similar content analysis measures was conducted by Patra and Padey (2021) involving nine fact-checking news agencies in India, which is one of only a few studies found in an Asian setting. This study was also supplemented by in-depth interviews among fact-checkers to get their insights on the goal of disinformation and its impact on society.

From a broader perspective, the media monitoring study conducted by Bunquin (2023) revealed that health and medicine were the fields frequently tackled by the science sections of leading print media in the Philippines.

In terms of classification of fake news, one notable study adopted by this paper was conducted by Tandoc, Lim, and Ling (2017). A highly cited study, it was a meta analysis of 34 scholarly works published from 2003 to 2017 that employed the term “fake news.” It surfaced six typologies of how the term “fake news” was operationalized in the study. These included news satire, news fabrication, photo manipulation, advertising and public relations, and propaganda. However, the works analyzed involved mostly developed countries, such as the United States, Australia, China, and Italy. Again, some of these typologies were adopted in this paper, but some were reworded to fit the claims analyzed.

The IFCN, as reported by Macaraeg (2020), also came up with a list of types of dubious claims in a year-end fact-check monitoring report it

released in 2020, which involved 20 types. Although the list was exhaustive, it can be argued that these cannot be directly used in formal academic research as these are not yet refined coding categories. Nonetheless, some of these were adopted in the current study. The report is also not an original research article published in a peer-reviewed journal.

The current study also adopted the four key disinfodemic format types and nine key themes of the disinfodemic put forward by Posetti & Bontcheva (2020A). This study hoped to generate empirical evidence for these concepts that they laid out.

Lastly, the most practical aspect of this study involved the analysis of the sources of information to verify science and health claims. The ones provided by Vera Files (2021) and Moyer (2020) were adopted in the current study.

During the height of COVID-19 pandemic, only two IFCN-listed news agencies in the Philippines—Rappler and VERA Files—were on the frontlines of the infodemic battle (Magsambol, 2018). This study exclusively examined Rappler’s fact-checking efforts.

Moreover, Meta (2021) has explicitly stated that it does not conduct its own fact-checking, but instead relies on third-party partners like Rappler and VERA Files to monitor and flag misinformation across Facebook, Instagram, and WhatsApp. While both agencies contributed significantly to the fight against the infodemic, Rappler demonstrated a particularly robust initiative. Rappler’s MovePH, a citizen journalism arm, bolstered these efforts through a Fact-Checking Mentorship Program for volunteers who assist in-house staff, a Facebook group with over 10,000 members for reporting fake posts, a national coalition called #FactsFirstPH, and monthly fact-checking webinars (Rappler.com, 2021; Meedan, 2021). These initiatives, which VERA Files did not have, reflect Rappler’s proactive and community-driven approach to tackling misinformation.

Additionally, as both Rappler and VERA Files are IFCN signatories, they frequently fact-check similar misinformation, reflecting complementary agendas. A notable example of this redundancy is their joint investigation into two Filipino overseas vloggers spreading COVID-19 misinformation, with Rappler acknowledging VERA Files’ contributions in the report (Pasion, 2023; Hanopol and Ancla, 2021). The study’s exclusive focus on Rappler allows for an in-depth examination of its distinctive fact-checking approach, providing valuable insights into the agency’s role in the Philippine infodemic landscape.

Launched in 2018, Rappler Fact-Check (Rappler.com, 2017A) emerged in response to the growing spread of false information, particularly during the 2016 Philippine presidential elections. Since then,

it has become one of the most prominent fact-checking organizations in the country, regularly debunking false claims on topics ranging from politics to public health. Rappler's fact-checks are aimed at combating viral falsehoods circulating on social media platforms, particularly Facebook, which is the dominant source of news for many Filipinos. Its fact-checking process involves rigorous research, verification from credible sources, and transparent reporting, all geared toward promoting media literacy and providing the public with accurate information.

In 2020, Rappler was included as a verified signatory of the International Fact-Checking Network (IFCN), a global network of fact-checkers managed by the Poynter Institute (Rappler.com, 2017B). This certification recognizes Rappler's adherence to IFCN's stringent Code of Principles, which includes commitments to non-partisanship, fairness, transparency of sources, and corrections policies. As an IFCN signatory, Rappler collaborates with other international fact-checkers and contributes to the global fight against misinformation. This inclusion also allows Rappler to participate in initiatives like Facebook's third-party fact-checking program, where its fact-checks help identify and reduce the spread of false content on the platform.

Rappler's role as an IFCN-certified agency positions it as a key player in managing the infodemic in the Philippines, particularly during critical events such as the COVID-19 pandemic and national elections. Its dedication to fact-checking is crucial in maintaining the integrity of public information and enhancing the accountability of both local and global misinformation efforts.

Much of the existing research on fact-checking, particularly in the Philippines, has largely focused on political and electoral fact-checking. This emphasis is understandable, given the contentious political climate and the pivotal role misinformation has played in influencing public opinion, especially during elections. Studies examining the veracity of political claims, the spread of disinformation targeting candidates, and the role of social media in shaping political narratives have been critical in understanding the dynamics of misinformation in the Philippine context. Rappler, for instance, has been at the forefront of debunking false claims during election periods, making it a vital player in safeguarding the electoral process.

However, while political and electoral fact-checking has received substantial attention, the domains of health and science fact-checking have been comparatively under-researched. This gap is particularly concerning in light of the COVID-19 pandemic, where misinformation about health protocols, vaccines, and treatments proliferated and posed significant risks to public health. Health misinformation has led to dangerous consequences, such as vaccine hesitancy, the spread of unverified cures, and general public

confusion about the pandemic. These issues highlight the critical need to examine health and science-related fact-checking efforts in more depth, as they play an essential role in combating not just political disinformation but also life-threatening misinformation that affects public health outcomes.

By studying health and science fact-checking, researchers can better understand how misinformation in these fields spreads, the types of false health claims that gain traction, and how fact-checking initiatives like those by Rappler can effectively counter them. Health fact-checking research is crucial in helping to improve public health communication, build trust in scientific information, and ensure that the public can make informed decisions during health crises, which have been recommended by existing research (Lasco & Yu, 2021; Yu, Lasco, & David, 2021;). Furthermore, in a science reportage monitoring study conducted by Buquuin (2020), it was found that health was the main science issue being covered by Philippine print media from 2017 to 2019.

This research also supports the four of the five items on WHO's (2021) public health research agenda for managing infodemics, namely measuring and monitoring the impact of infodemics during health emergencies, detecting and understanding the spread and impact of infodemics, evaluating infodemic interventions and strengthening the resilience of individuals and communities to infodemics, and promoting the development, adaptation and application of tools for managing infodemics.

METHODOLOGY

This study utilized web scraping to collect all fact-checks published on Rappler.com's fact-checks section from 2017 to 2024. For analysis, only the 435 fact-checks related to science and health, published between January 17, 2020, and July 21, 2023, were included. These dates align with Rappler's first COVID-19-related fact-check and the Philippine government's lifting of the State of Public Health Emergency due to COVID-19.

The study employed a census approach, meaning the entire population of relevant fact-checks within the above mentioned period was included, eliminating the need for random sampling. This was to ensure that the study was as comprehensive and robust as possible given that it analyzed only one news agency. This also entails that inferential statistics was no longer used, as descriptive statistics would suffice, as was the case in related fact-check studies (e.g., Chua and Soriano, Patra and Pandey, 2021; Bunquin, 2023).

To ensure accuracy in data collection, the fact-checks were systematically organized in a spreadsheet-based coding frame. Several rounds of data cleaning were conducted to correct any errors or inconsistencies in the dataset, ensuring that the analysis was based on reliable and complete information.

For data analysis, descriptive statistics were used to examine several variables and their respective categories. These variables were selected based on existing literature and were defined as follows:

- Kind of health fact-check: categorized as either “COVID-19” or “general health.”
- Language: whether the fact-check was published in English or Filipino.
- Type of dubious claim: classified into six categories: Scam, Hoax, Conspiracy Theory, Pseudoscience, False Policy, or Propaganda.
- Form of the claim: whether the claim was presented in text, video, or photo format.
- Social media platform: where the dubious claims originated (e.g., Chat, Facebook, Instagram, TikTok, TV, Twitter, Webpage, YouTube).
- Fact-check rating: Rappler’s rating of the claim, which could either be “False” or “Missing Context.”
- Reason for fact-checking: the primary motivation behind fact-checking a claim, categorized as Virality, Reputation, Tool (flagged by Meta’s fact-checking system), Submission (sent by readers), or Public Interest.
- Fact-check authorship: whether the fact-check was authored by Rappler staff or volunteers.
- Method of verification: use of primary sources (i.e., official records, official sources, research articles, and direct observation) or secondary sources (e.g., news articles)

While the first three variables (kind of health fact-check, language, and type of claim) had a one-to-one correspondence with each fact-check, allowing their frequencies to total 435, the other variables permitted multiple categories per fact-check. Consequently, frequencies for these variables

exceeded 435. Additionally, for propaganda-related claims, the source and target of the claims were analyzed, and the political figures involved were identified and categorized (Duterte, Marcos, Robredo, Pangilinan, Hontiveros, or “Not Applicable”).

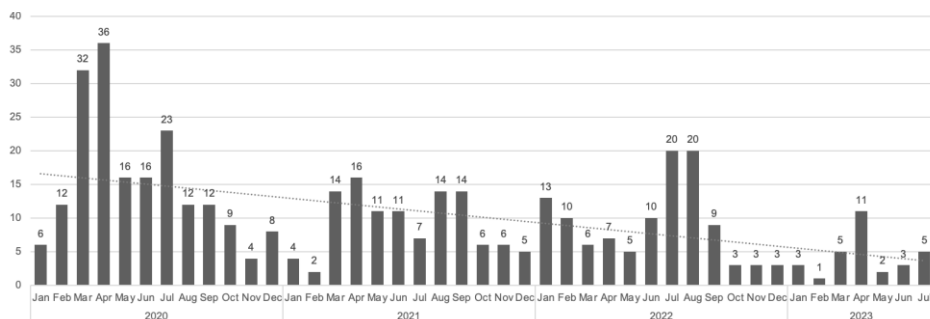
Intercoder reliability was established using Krippendorff’s alpha to ensure the consistency of the content analysis. Two trained coders performed independent analyses, and three pre-analysis waves were conducted to refine the coding scheme. An acceptable Krippendorff’s alpha score of 0.92 was achieved, exceeding the recommended threshold of 0.81 for content analysis reliability (Neuendorf, 2004).

FINDINGS AND DISCUSSION

Fact-Checking Trends

Figure 1

Trends in the Frequency of Rappler’s Science and Health Fact-Checking, January 2020 to July 2023 (N=435)



A total of 435 COVID-19 and health-related fact-checks published by Rappler.com were analyzed in this study.

Figure 1 illustrates the longitudinal trends in Rappler’s fact-checking activity during the COVID-19 pandemic, showing a marked increase in fact-checks beginning in March 2020. This surge corresponds with the onset of the pandemic in the Philippines, when the first cases of COVID-19 were recorded. Rappler’s role as an early responder is significant, as they were among the first members of the IFCN to publish a COVID-19 fact-check (Macaraeg, 2020). Their first fact-check addressed a viral false claim about a supposed Severe Acute Respiratory Syndrome (SARS) case in Mandaluyong City, which spread unnecessary panic.

The data indicate a sharp increase in fact-checks in March and April 2020, with April seeing the highest number of reports (36 fact-checks). This spike aligns with the declaration of the Enhanced Community

Quarantine (ECQ), a period marked by public anxiety and an explosion of misinformation. This trend demonstrates Rappler's ability to swiftly respond to information crises during pivotal moments in the pandemic, reflecting its role as a vigilant information watchdog. This pattern is consistent with the IFCN's 2020 monitoring report, which also observed the highest volume of fact-checking activity across signatory organizations during this period.

Interestingly, despite the decline in pandemic-related fact-checks over time, Rappler continued to maintain its fact-checking activity during the 2022 Philippine General Elections, incorporating health-related fact-checks into its broader political coverage. The elevated number of fact-checks during July and August 2022, shortly after the elections, underscores the intersection of public health misinformation with political narratives.

Overall, the trend shows a gradual decline in health-related fact-checking activity post-pandemic, likely reflecting the nation's recovery and the reduced intensity of health misinformation as the crisis subsided.

Kinds of Health Fact-Check and Language

Table 1

Frequency Distribution of the Kinds of Health Fact-check and Language Used by the Fact-checks (N=435)

Variable	f	%
Kind of health fact-check		
COVID-19	323	74.3
General health	112	25.7
Language		
English	415	96.4
Filipino	20	4.6

Table 1 presents the distribution of fact-checks by type and language. The majority or 74.3% of fact-checks focused on COVID-19-related misinformation, while 25.7% covered general health misinformation. This highlights Rappler's proactive stance in addressing not only pandemic-related falsehoods but also broader health scams, emphasizing the pervasive nature of health misinformation. The findings validate the initial speculation that the health crisis would expose a growing industry of health scams, particularly on social media platforms, where unverified health claims run rampant.

In terms of language, English remains the dominant medium for Rappler’s fact-checks (96.4%), despite recent efforts to localize content using regional languages, including Filipino (4.6%). This underscores both the reach of English-language media and the challenges of effectively translating technical health information into local languages. Science communication often involves simplifying complex terminologies, a task that becomes more difficult when direct translations into Filipino are not available. The limited use of regional dialects suggests a need for further localization to make fact-checks more accessible to a broader audience, especially in rural areas.

Platforms

Figure 2

Distribution of Platforms Where Dubious Claims Were Made (N=523)

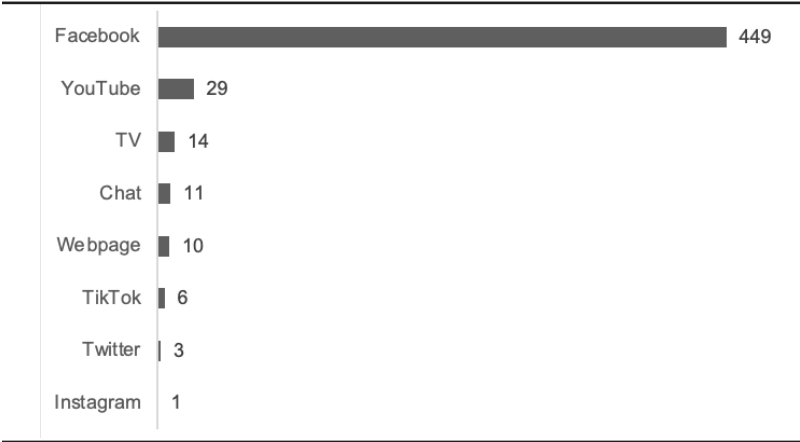
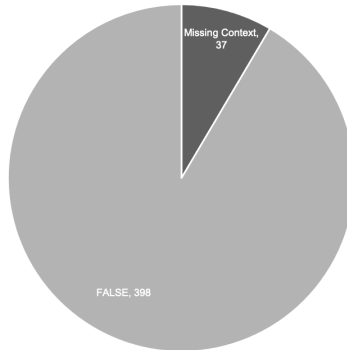


Figure 2 shows the distribution of platforms where false health claims were identified. Facebook emerged as the dominant platform, reflecting its widespread use in the Philippines and its central role in the dissemination of misinformation. This was consistent with Chua and Soriano’s (2020) study. While it is possible that misinformation is spread across multiple platforms, Rappler’s data primarily captured Facebook due to its prominence and Rappler’s focus on monitoring this platform. However, the fact that other platforms were less frequently recorded suggests that future research should explore the prevalence of misinformation on other social media and digital platforms. Notably, Rappler’s efforts extended beyond social media, with fact-checks covering false claims made on television, particularly during President Duterte’s late-night addresses. This highlights the importance of scrutinizing traditional media, where public officials’ statements can significantly shape public perceptions, often with limited immediate rebuttal.

Fact-Check Rating

Figure 3

Distribution of Fact-check Ratings (N=435)

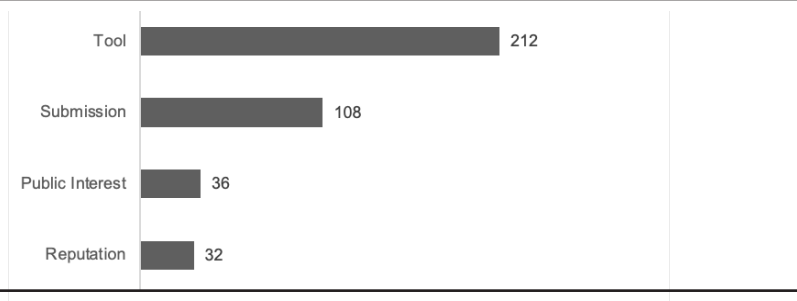


Rappler utilizes a six-category rating system for fact-checking dubious claims (Rappler.com, 2023). However, Figure 3 shows that, of the 435 fact-checks analyzed, only two categories—“false” and “missing context”—were commonly used for health-related fact-checks. The other categories may be more extensively used in Rappler’s political and electoral fact-checking efforts. While other ratings such as “altered photo” or “manipulated video” were observed, their occurrence was so rare that they were subsumed into the “missing context” category to avoid outliers in the analysis. The absence of ratings like “satire” suggests that satirical or humorous misinformation was less prevalent in health-related misinformation during the period studied, with most claims falling under outright falsehoods or misleading information lacking proper context.

Reasons for Fact-Checking Claims

Figure 4

Distribution of the Reasons Why Dubious Claims Were Fact-checked (N=664)



The reasons for fact-checking claims analyzed in this study were guided by Rappler’s established fact-checking protocols (Rappler.com, 2017). As shown in Figure 4, the primary driver for fact-checking was the potential for claims to go viral, reflecting the proactive stance Rappler takes in combating misinformation before it spreads uncontrollably. This aligns with its use of Meta’s exclusive fact-checking flagging system, which empowers Rappler to identify and address potentially harmful content circulating on social media platforms.

Another significant reason for fact-checking was citizen participation, highlighted by reader submissions through channels such as the “Fact-Checking in the Philippines” Facebook group and email submissions. This underscores the importance of citizen journalism in identifying and countering false claims. By involving the public in the fact-checking process, Rappler adopts a participatory approach that not only increases the volume of flagged content but also fosters a culture of vigilance and collective responsibility in fighting misinformation.

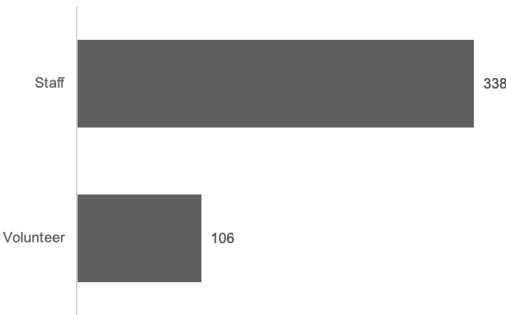
In addition to viral potential, some claims were fact-checked due to their relevance to public interest, particularly those capable of causing widespread confusion or alarm. This preemptive approach demonstrates Rappler’s forward-thinking strategy in mitigating misinformation before it gains traction, especially for issues with serious implications for public health or safety.

Finally, Rappler also fact-checked claims that had the potential to damage the reputation of certain individuals or institutions.

Authorship of Fact-Checks

Figure 5

Distribution of Authorship (N=444)



As Figure 5 indicates, most of the fact-checks were authored by Rappler staff, though volunteers played a notable role in supporting fact-checking efforts. The engagement of citizen journalists through Rappler's Move.PH initiative is particularly noteworthy, as it demonstrates the organization's ability to mobilize a network of volunteers and leverage their contributions in the battle against disinformation. This collaborative approach also highlights the increasing role of community-driven journalism in the digital age.

Types of Dubious Claims

Figure 6

Distribution of the Types of Dubious Claims (N=435)

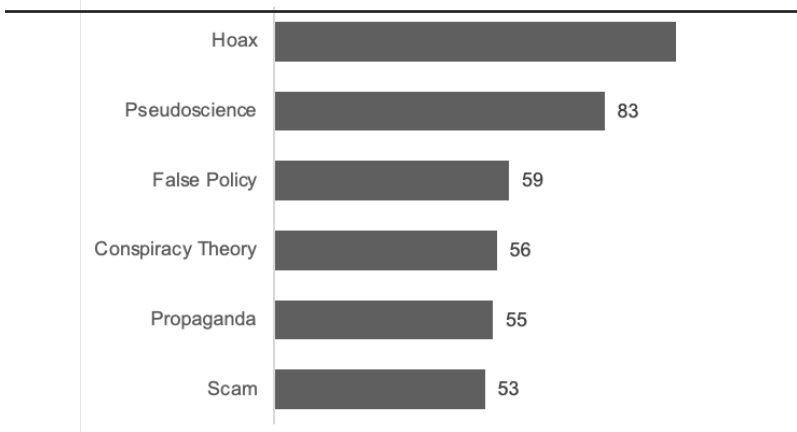


Figure 6 outlines the types of dubious claims fact-checked by Rappler. The terms used in the analysis are derived from related literature (e.g., Macaraeg, 2020). Majority of these are hoaxes, which are outrageous, fabricated claims that create unnecessary fear or panic by presenting an impending danger, such as an imminent health catastrophe or conspiracy. These claims often misinterpret scientific findings or use extreme scenarios to discourage people from supporting legitimate health policies or scientific evidence. By fostering fear and distrust, hoaxes aim to demonize science, promote misconceptions, and undermine public health measures. Extreme examples of hoaxes included is a supposed “Zombie apocalypse” or vaccine-related genocide. These outlandish claims were often rooted in anti-vaccination narratives and pandemic denial, all of which were widespread during the pandemic.

Second are pseudoscience content, which involves promoting incorrect or unverified solutions to health problems. These fake solutions lack scientific evidence and often claim miraculous cures or treatments that

are either ineffective or harmful. Synonymous to myths, pseudoscience may also arise from the misinterpretation of research results, presenting dubious claims as fact. They typically assert positive or negative health effects that are not supported by legitimate scientific research, misleading the public and potentially endangering lives. These claims, while not entirely fabricated like hoaxes, lacked scientific support and capitalized on people's fears and desires for quick solutions during a health crisis. The emergence of such scams on social media further points to the need for more rigorous health communication and public education efforts. Some examples of these pseudoscience content include the practice of *tuob* or inhaling steam to "cure" COVID-19 or the belief that onions placed in a room would absorb viruses.

Third involve dubious claims containing false policies. These are announcements or policies supposedly issued by public officials. These claims may suggest leniency or changes in health measures, such as community quarantine restrictions or reopening plans, causing confusion among the public. By spreading inaccurate information, these claims can undermine official health guidelines and hinder efforts to control public health emergencies.

Fourth are conspiracy theories, which suggest that powerful individuals or groups are intentionally creating crises or health problems so they can sell solutions, such as vaccines or medications, to the public. These narratives often paint elites, corporations, or governments as manipulating the public for financial gain, fueling mistrust in health authorities and scientific institutions. Staple subjects in these posts include Bill Gates and the vaccine developers Pfizer and Moderna.

Fifth are content containing propaganda. In the context of health disinformation, propaganda is used to malign or discredit political candidates, often linking them to mishandling health crises or spreading false narratives about their actions during a pandemic. These claims may exaggerate or fabricate health-related issues to tarnish the reputation of opponents, often for political gain, especially during election periods. The number one target of such attacks, as discussed in the succeeding, are former Vice President Leni Robredo and her *Angat Buhay* program.

Last were scam content. These claims are designed to deceive people into purchasing fraudulent products or services, often by using misleading endorsements from well-known figures. The goal is to profit from false promises, such as miracle cures or health supplements, without any scientific backing. Scams often exploit people's health fears or desires for quick solutions, particularly during crises like the COVID-19 pandemic.

It is also worth noting the relevance of unveiling the architects of health disinformation, just like what Ong and Cabañes (2019) did in their

groundbreaking study. It was observed in the study that there had been influencers who persistently and passionately spread dubious health claims online and outrightly discredited science and health authorities. Worse was that their content consistently achieved viral status. Who are these people? What are their motives? Who are they working for? Are they part of a health disinformation troll farm just like political trolls? If so, then the workings of such disinformation operations must be exposed.

Sources and Targets of Propaganda

Figure 7

Distribution of the Perpetrators of Propaganda-related Fact-check (N=57)

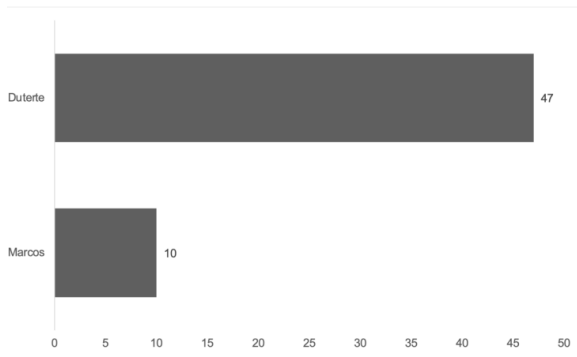
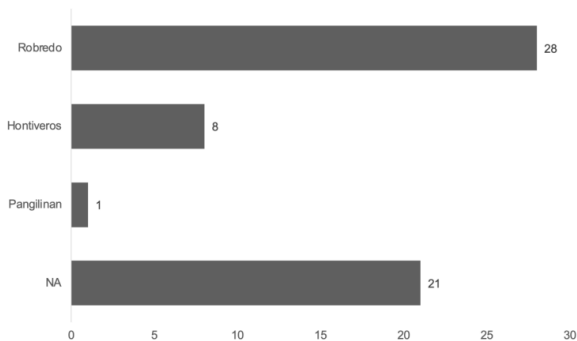


Figure 8

Distribution of the Targets of Propaganda-related Fact-checks (N=58)



Figures 7 and 8 indicate the perpetrators and the targets of the propaganda-related claims from Figure 6. Take note that the total number of perpetrators and targets exceed the total number of propaganda-related fact checks (N=55) because there had been multiple sources and targets reflected in some of the fact-checks.

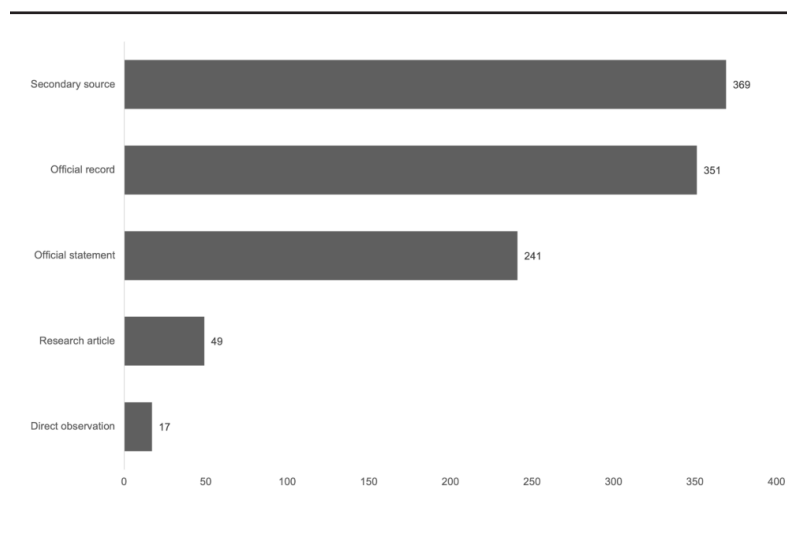
The findings indicated in these figures support an analysis conducted by Vera Files (Retona, 2021) and Chua and Soriano (2021) that Robredo in particular and the opposition in general were the “favorite” target of disinformation campaigns. Indeed, Robredo and her Angat Buhay Program were heavily bombarded by such propaganda. It can also be seen that other members of the opposition, such as Hontiveros and Pangilinan, were also targeted. However, a substantial number of fact-checks were classified as “NA”, because the claims made in such fact-checks did not necessarily malign any political figure. Instead, such claims involved projecting a good image of either Marcos Jr. or the Dutertes.

On the other hand, in contrast to the Vera Files report, this study found that the Dutertes and not Marcos Jr. were the primary source of health disinformation. This is maybe a notable difference between electoral and health fact-checking.

Sources of information

Figure 9

Distribution of the Sources of Information Used in the Fact-checks (N=1,027)



The study adopted the verification methods outlined by Vera Files (2021) and Moyer (2020) to examine the sources of information Rappler used in verifying science and health claims. The findings reveal that Rappler used various sources in fact-checking claims, relying more on primary sources (N=658), which combines official records, official statements, research articles, and direct observation, than on secondary sources (N=369), which included news articles from mainstream media and health websites. This is why the total number of information sources used by Rappler (N=1,027) exceeded the total number of fact-checks analyzed (N=435).

Rappler's verification approach often involved triangulation, a journalistic best practice that uses multiple sources, particularly official records and official statements backed up by secondary sources, to confirm the validity of a claim.

Official records formed a substantial portion of its primary sources, including memoranda, statistical data, press releases, bulletins, and other documents from Philippine government agencies and international organizations like the World Health Organization (WHO), Centers for Disease Control (CDC), and Food and Drug Administration (FDA). These records also included original videos, photos, or graphics, that Rappler traced when fact-checking manipulated content.

Official statements included pronouncements, press statements, and direct quotations made by public officials, authority figures, and other concerned individuals to address specific issues. These were echoed by Rappler in their own fact-checks in order to amplify them.

Secondary sources consisted primarily of news articles from Rappler's own platform, other reputable news agencies and health websites such as Mayo Clinic, Healthline, Cleveland Clinic, National Institutes of Health, and Harvard Health. These sources played a supplementary role, providing context and additional validation. Related fact-checks cited by Rappler in a particular fact-check article were also classified as secondary sources.

Research articles were another critical resource, particularly for addressing technical science topics. These articles allowed Rappler to establish factual accuracy based on evidence rather than relying solely on expert statements, reinforcing that science prioritizes empirical data over authority-based reasoning. Articles from reputable journal publishers and indexing sites were mostly cited, such as PubMed, Nature, the Journal of the American Medical Association, The Lancet, and Frontiers.

Lastly, Rappler employed direct observation to detect subtle forms of misinformation. In this case, the information source is the dubious post itself. This involved debunking a dubious post simply by closely looking

over it and examining its features. This included pointing out deceptive URLs, impersonating websites, or social media pages lacking a ‘Verified’ mark.

CONCLUSION

This study analyzed 435 health-related fact-checks published on Rappler.com between January 2020 and July 2023, revealing key insights into the nature and evolution of misinformation during the COVID-19 pandemic and beyond.

Although this study is limited to the monitoring and content analysis of fact-checks, its findings are best understood through the lens of the Agenda-Setting Theory (McCombs & Shaw, 1987), a tried-and-tested framework in studying news media effects. This theory highlights the watchdog role of media in shaping public discourse and prioritizing societal issues. Fact-checking embodies this role by challenging false claims and forwarding truth, thereby influencing public perceptions and fostering informed decision-making (Monsees, 2023). Specifically, science fact-checkers aim to elevate science as a cornerstone of societal progress, advocating for evidence-based reasoning and rationality. By doing so, they contribute to cultivating a culture of science that values critical thinking and informed choices.

Despite originating in the West, the theory has also been increasingly used as a framework by many Global South nations to study the political effects of their media systems that are unique to their own societies (e.g., Baumann et al., 2018). In a developing nation like the Philippines, where structural inequalities and fragmented institutions shape the flow of information (Lasco & Yu, 2021; Yu, Lasco, & David, 2021), the agenda-setting role of media is critical in combating health disinformation.

Rappler’s proactive efforts to flag and debunk health-related misinformation exemplify the media’s role in defining the public health agenda during the COVID-19 pandemic. By highlighting misinformation about vaccines, pseudoscience, and policy-related claims, Rappler steered the discourse toward evidence-based science and public health policies. This aligns with the second-level agenda-setting function, where media not only prioritize issues but also frame them in specific ways. Rappler’s reliance on authoritative primary sources—official records, research articles, and statements from public health institutions—demonstrates its commitment to factual framing, essential for fostering trust in health information.

In addition to its agenda-setting role, Rappler’s watchdog function is particularly significant in the context of a developing nation. The watchdog role of media is vital in holding institutions accountable and ensuring transparency in public health communication. The study’s findings on

propaganda and conspiracy theories targeting political figures reveal how disinformation undermines trust in governance and public health systems. Rappler's efforts to expose and counter these narratives underscore the importance of an independent media in protecting the integrity of public discourse. This watchdog function becomes even more critical in a country where institutional weaknesses and political polarization often hinder effective health communication.

In a developing nation like the Philippines, the media's role as an agenda-setter and watchdog is amplified by socio-economic and political challenges. The findings reveal how health disinformation disproportionately affects vulnerable populations, exploiting anxieties about public health and undermining science-based policies. Media organizations like Rappler are uniquely positioned to counter these narratives by prioritizing factual information and holding power to account. This dual role of agenda-setting and watchdog functions not only combats disinformation but also strengthens democratic institutions and public trust.

In conclusion, understanding the infodemic through the lens of Agenda-Setting Theory and the media's watchdog role highlights the critical importance of independent, fact-based journalism in a developing nation. As the Philippines continues to navigate health crises and the broader challenges of disinformation, media organizations must continue to assert their influence in shaping public discourse and safeguarding the truth. The findings of this study also resonate with broader trends in Global South nations, where resource constraints and systemic inequities heighten the impact of the infodemic. However, the Philippine case is uniquely characterized by the interplay of social media dominance, weak institutional trust, and socio-political polarization.

LIMITATIONS AND RECOMMENDATIONS

In terms of fact-checking research and disinformation studies, this paper had three limitations. Rappler has been into fact-checking since 2017. Hence it is recommended for future research to conduct a full-blown monitoring study of Rappler's entire fact-check archive to be able to uncover the bigger impact of its fact-checking initiatives. Second, Vera Files is another IFCN signatory and Meta third party partner. It would also be ideal to scrutinize the agency's fact-checking efforts. Though it is recommended, to avoid doing the same analysis, to analyze not just VERA Files, but *Tsek.ph*, a larger fact-checking coalition in which VERA Files is a member. Rappler is not a member of this coalition as it was leading its own initiative through #FactsFirstPH.

And most importantly, it would also be good to study the agenda-setting impact of Rappler's health fact-checks to assess their effectiveness in educating the public about false science and health information. This could

also allow for most robust statistical analysis to be performed. However, a measure of the public sentiments on the fact-checks must be obtained, such as social media likes, shares, views, and comments, which is a tedious task.

The research reveals significant findings, particularly in the analysis of dubious claims, which exposed how certain influencers purposefully spread disinformation and actively oppose science-backed health advice and policies. These influencers often use their platforms to disseminate misleading or false information, creating confusion and undermining public trust in scientific institutions. By promoting narratives that deny the efficacy of vaccines, discourage adherence to health protocols, or foster conspiracy theories about global health crises, these figures contribute to the infodemic, endangering public health efforts. Understanding the role of these influencers is crucial for future research. Just as scholars have examined political trolls and their influence in manipulating public opinion, the architects of health science disinformation need to be scrutinized. Identifying key actors in the dissemination of health-related falsehoods helps expose their motives—whether financial, ideological, or political—and reveals the methods they use to manipulate their audiences. This knowledge can then inform the development of targeted interventions to counteract disinformation campaigns and protect public health.

Moreover, by studying these disinformation architects, researchers can develop more effective strategies for monitoring and mitigating the spread of false health information. Similar to political disinformation, health-related falsehoods can have far-reaching consequences, as seen in vaccine hesitancy and the resistance to pandemic recovery measures. In this context, research on the influencers behind health disinformation is essential to combating the growing infodemic and ensuring that science-backed policies are trusted and followed.

In terms of media and information literacy campaigns, to effectively combat misinformation in the future, sustained fact-checking efforts are essential, even beyond the immediate concerns of the COVID-19 pandemic. Although the number of health fact-checks has declined as the country recovers from the crisis, misinformation is a persistent issue that evolves with new health challenges. Fact-checking organizations like Rappler should continue to monitor health-related misinformation, expanding their coverage to include a broader range of health topics. This will ensure the public remains informed and protected from the potential harm caused by false health claims.

Moreover, while English remains the dominant language in Rappler's fact-checks, the importance of multilingual fact-checking cannot be overstated. Expanding the use of local languages and dialects in fact-checking reports would make these efforts more accessible to a wider segment of the population, particularly in rural areas where English is less

commonly spoken. By localizing content, fact-checking can have a more significant impact in reaching underserved communities and improving overall public understanding of critical health issues.

Given the rapidly shifting digital landscape, it is also crucial for fact-checkers to diversify the platforms they monitor. Although Facebook continues to be a major source of misinformation, other platforms like TikTok, YouTube, and Instagram are rising in influence, especially among younger audiences. Expanding the scope of platform monitoring will ensure a more comprehensive response to the spread of misinformation across different media channels, thereby preventing harmful narratives from gaining traction in overlooked areas of the digital ecosystem.

Rappler's collaboration with citizen journalists has proven effective in enhancing fact-checking efforts, and further investments in training programs, mentorships, and fellowships can broaden the reach of these initiatives. Engaging more volunteers and expanding citizen journalism networks will help scale the fight against misinformation, particularly on less-monitored platforms or in communities with lower access to fact-checking resources. Empowering citizens to actively participate in fact-checking not only increases the quantity of reports but also strengthens community-driven responses to disinformation.

In addition to these initiatives, there is a pressing need for enhanced public awareness campaigns and digital literacy programs. By educating the public on how to identify and critically assess misinformation, especially concerning health-related topics, the spread of false claims can be mitigated. Collaboration between media organizations, educational institutions, and government agencies can bolster these efforts, creating a more informed and resilient public that is less susceptible to the effects of disinformation.

Finally, policymakers should recognize the importance of fact-checking as a tool in managing public health crises and other social challenges. Government support for independent fact-checking initiatives is crucial for ensuring their sustainability. By integrating fact-checking into national health strategies and providing funding for these efforts, governments can ensure a faster, more coordinated response to future infodemics, safeguarding public health and preventing the spread of harmful misinformation.

All of these are consistent with recommendations by such reputable agencies such as the WHO (2021) and DOH (Samonte et al., 2020).

REFERENCES

- Baumann, H.C., Zheng, P., & McCombs, M. (2018). First and second-level agenda-setting in the 2014 Indian general election: a time-series analysis of party-media relation. *Asian Journal of Communication*, 28(2), 205-226. <https://doi.org/10.1080/01292986.2017.1390773>.
- Bunquin, J. B. A. (2023). Framing and sourcing of science in Philippine newspapers from 2017 to 2019. *Plaridel*, 20(1), 47-70. <https://doi.org/10.52518/2020-10bnquin>
- Chua, Y.T. & Soriano, J.C. (2020). Electoral disinformation: Looking through the lens of Tsek.ph fact checks. *Plaridel*, 17(1), 285-295. <https://doi.org/10.52518/2020.17.1-10chusrn>
- Deinla, I. B., Mendoza, G. A. S., Ballar, K. J., & Yap, J. K. (2022). The link between fake news susceptibility and political polarization of the youth in the Philippines. *Asian Journal of Political Science*, 30(2), 160–181. <https://doi.org/10.1080/02185377.2022.2117713>
- Hanapol, N.R. & Ancla, B.M. (2021). *VERA FILES FACT CHECK YEARENDER: Bakulaw, Bakulam, Bakuna: The forms that COVID-19 vaccine disinformation took in 2021*. Verafil.es.org. <https://verafil.es.org/articles/vera-files-fact-check-yearender-bakulaw-bakulam-bakuna-forms>
- Kandel, N. (2020). Information disorder syndrome and its management. *Journal of Nepal Medical Association*, 58(224), 280-285. <https://doi.org/10.31729/jnma.4968>
- Lasco, G. & Yu, V.G. (2021). Communicating COVID-19 vaccines: lessons from the dengue vaccine controversy in the Philippines. *BMJ Global Health*. <http://dx.doi.org/10.1136/bmjgh-2021-005422>
- Macaraeg, P. (2020). *Fact-checking: A year of infodemic*. Rappler.com. <https://www.rappler.com/newsbreak/iq/fact-checking-year-infodemic-2020/>
- McCombs, M. E.; Shaw, D. (1972). The agenda-setting function of mass media. *Public Opinion Quarterly*, 36 (2), 176-187.
- Magsambol, N. (2018). *Facebook partners with Rappler, Vera Files for fact-checking program*. Rappler.com. <https://www.rappler.com/technology/social-media/200060-facebook-partnership-fact-checking-program/>
- Meedan. (2022). *The battle for facts in the Philippines: Launching #FactsFirstPH*. Meedan.com. <https://meedan.com/post/the-battle-for-facts-in-the-philippines-launching-factsfirstph-f>
- Meta. (2021). *Meta's Third-Party Fact-Checking Program*. Facebook.com. <https://www.facebook.com/formedia/mjp/programs/third-party-fact-checking>
- Monsees, L. (2023). Information disorder, fake news and the future of democracy. *Globalizations*, (20)1, 153-168, <https://doi.org/10.1080/14747731.2021.1927470>

- Moyer, M. W. (2020). Sources and experts: Where to find them and how to vet them. In Hatch, J. & Jackson, N. KSJ science editing handbook (pp. 27-38). <https://ksjhandbook.org>
- Neuendorf, K. A. (2002). *The content analysis guidebook*. Sage Publishing.
- Ong, J. C., & Cabañes, J. V. (2019). When disinformation studies meets production studies: Social identities and moral justifications in the political trolling industry. *International Journal of Communication*, 13, 5771–5790. <https://scholarworks.umass.edu/server/api/core/bitstreams/78d14368-e711-4d5a-ae83-0dc15e101e9d/content>
- Pasion, L. (2023). *They're getting smarter: How disinformation peddlers avoid regulation*. Rappler.com. <https://www.rappler.com/newsbreak/in-depth/they-are-getting-smarter-how-disinformation-peddlers-avoid-regulation/>
- Patra, R.K. & Pandey, N. (2021). Disinformation on Novel Coronavirus (COVID-19): A content analysis of news published on fact-checking sites in India. *DESIDOC Journal of Library & Information Technology*, 41(4), 275–283. <https://doi.org/10.14429/djlit.41.4.16556>
- Posetti, J. & Bontcheva, K. (2020A). *Disinfodemic: Deciphering COVID-19 disinformation* [Policy brief]. UNESCO. <https://unesdoc.unesco.org/ark:/48223/Pf00000374416>
- Posetti, J. & Bontcheva, K. (2020B). *Disinfodemic: dissecting responses to COVID-19 disinformation* [Policy brief]. UNESCO. <https://unesdoc.unesco.org/ark:/48223/Pf00000374417>
- Rappler.com. (2017). *Rappler now a member of the International Fact-Checking Network*. Rappler.com. <https://www.rappler.com/bulletin-board/186557-rappler-member-icfn-fact-check-journalism/>
- Rappler.com (2021). *Want to level up your fact-checking skills? Join Rappler's mentorship program for 2021*. Rappler.com <https://www.rappler.com/moveph/fact-checking-mentorship-program-webinar-participants-2021/>
- Rappler.com. (2023). *[PANOORIN] Fact check rating system*. Rappler.com. <https://www.rappler.com/newsbreak/fact-check/fact-check-rating-system/>
- Retona, M. (2021). *VERA FILES FACT CHECK YEARENDER: Marcos Jr. benefited the most from election-related disinformation in 2021, Robredo was favorite target*. Verafiles.org. <https://verafiles.org/articles/vera-files-fact-check-yearender-marcos-jr-benefited-most-ele>
- Samonte, P.B., Maddumba, D., Fancubit, M., & Sabile, J. (2020). *COVID-19 infodemic response overview for the Philippines*. WHO. https://www.who.int/docs/default-source/coronaviruse/risk-comms-updates/im-posters/poster-philippines.pdf?sfvrsn=b9edb0c1_5
- Tandoc Jr, E. C., Lim, Z. W., & Ling, R. (2018). Defining “fake news” A typology of scholarly definitions. *Digital journalism*, 6(2), 137-153.

- Tandoc, E. C. (2019). The facts of fake news: *A research review*. *Sociology Compass*. <https://doi.org/10.1111/soc4.12724>
- Tandoc, E.C., Seet, S., Mak, W.W., & Lua, K.H. (2024): Content tracing: examining fact-checking via a WhatsApp group during the COVID-19 pandemic. *Behaviour & Information Technology*, 1-11. <https://doi.org/10.1080/0144929X.2024.2318613>
- UNICEF.org (2024). *Measles and pertussis outbreaks a wake-up call for the Philippines*. <https://www.unicef.org/philippines/press-releases/measles-and-pertussis-outbreaks-wake-call-philippines>
- University of the Philippines. (2018). *Executive Summary: Report of the PGH Dengue Investigative Task Force*. UP System. <https://up.edu.ph/executive-summary-report-of-the-pgh-dengue-investigative-task-force/>
- Vera Files. (2021). VERAfied: A DIY guide to fact-checking and fighting misinformation and disinformation. *Verafiles.org*. <https://verafiles.org/articles/verafied-diy-guide-fact-checking-and-fighting-misinformation>
- Wardle, C., & Derakhshan, H. (2017). *Information Disorder: Toward an Interdisciplinary Framework for Research and Policymaking*. Council of Europe. <https://rm.coe.int/information-disorder-report-november-2017/1680764666>
- World Health Organization. (2021). *WHO public health research agenda for managing infodemics*. <https://www.who.int/publications/item/9789240019508>
- Yu, V. G., Lasco, G., & David, C.C. (2021). Fear, mistrust, and vaccine hesitancy: Narratives of the dengue vaccine controversy in the Philippines. *Vaccine*, 39(35), 4964-4972.
- Zielinski, C. (2021). Infodemics and infodemiology: a short history, a long future. *Pan American Journal of Public Health*, 45. <https://doi.org/10.26633/RPSP.2021.40>

CBFRCM and FRACT : Modifications of the Social Amplification of Risk Framework (SARF) towards a Community-based Disaster Risk Reduction

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ABSTRACT

This study was conducted to address the gap in the literature on disaster studies, specifically on risk communication management. The extensive literature on disaster studies has examined risk communication and disaster management as separate concerns which emphasize the significant role of risk communication and management at the level of the communities to enhance community preparedness for disasters like flooding. No literature has been found specifically in the area of risk communication management. This study, therefore, aimed to focus on this gap integrating risk communication with disaster risk management towards a more inclusive approach to risk reduction. Using a convergent parallel mixed method design, this study was conducted utilizing both the qualitative and quantitative approaches in the data collection and analysis guided by the integrated frameworks of the disaster risk management and the social amplification of risk (SARF). The merging of both results in the analysis and interpretation helped identify the convergence or divergence of the findings. Results of the study revealed that the risk reduction strategies can be further enhanced through risk communication management using a localized and participatory approach in the proper knowledge transfer of flood risk communication among the stakeholders involved, placing the community as the central actor for amplification. Thus, the study proposed a community-based flood-risk communication management (CBFRCM) framework and a Flood Risk Amplification Communication Theory (FRACT). The study recommends the application of the proposed theory to test the operationalization of the modification of SARF as well as its appropriateness to the context of flood vulnerabilities of communities.

Keywords: *flood-risk amplification communication theory; risk communication management; risk communication; strategic risk communication; community-based risk reduction*

INTRODUCTION

The United Nations estimates that yearly disasters worldwide cause some \$520B in economic losses and deplete public funds that can be diverted towards basic services and social protection. With the heightened awareness of risks, governments must make the necessary actions in developing disaster-resilient communities (Bacasma, 2018). In the Philippine context, the NDRRMC reported in 2017 that the economic cost of typhoons and flashfloods amounted to Php 6446B due to the 22 tropical storms, flashfloods and intertropical convergence zones. Flashflood damages has been estimated to Php 104,229M excluding the damages to private properties, commercial activities and foregone revenues from the hundreds of people who dies as a result of the calamity. Similarly, UNISDR estimated the cost of disaster in the Philippines accounts for 0.8% of the GDP since it affects mostly production of goods and investments, translating to imbalance in payments, employment, exchange rate and inflation (Cordero, 2018).

Flooding, in particular, is a potential threat with serious implications to development initiatives, especially in densely populated urban areas. It also exposes and increases communities to further risks and hazards. As risk is the combination of hazard and vulnerability, representing the potential for loss or damage. Risk is intrinsically linked to vulnerability, representing the potential for harm or loss arising from the interaction between a hazard or threat and a vulnerability. The role of government and financial restrictions are the two major problems that developing, and least developing countries face when managing disasters. It has serious implications as well as open avenues for identifying areas of improvement on the social and physical dimension of a city's development (Auzzir, Haigh & Amaratunga, 2014). Lasco, et al (2009) emphasized that the Philippines, in general, is considered as very vulnerable to climate change as an archipelago. The frequency of typhoons and storms that pass through the Philippines archipelago make it more vulnerable to flooding (Magalang, 2010).

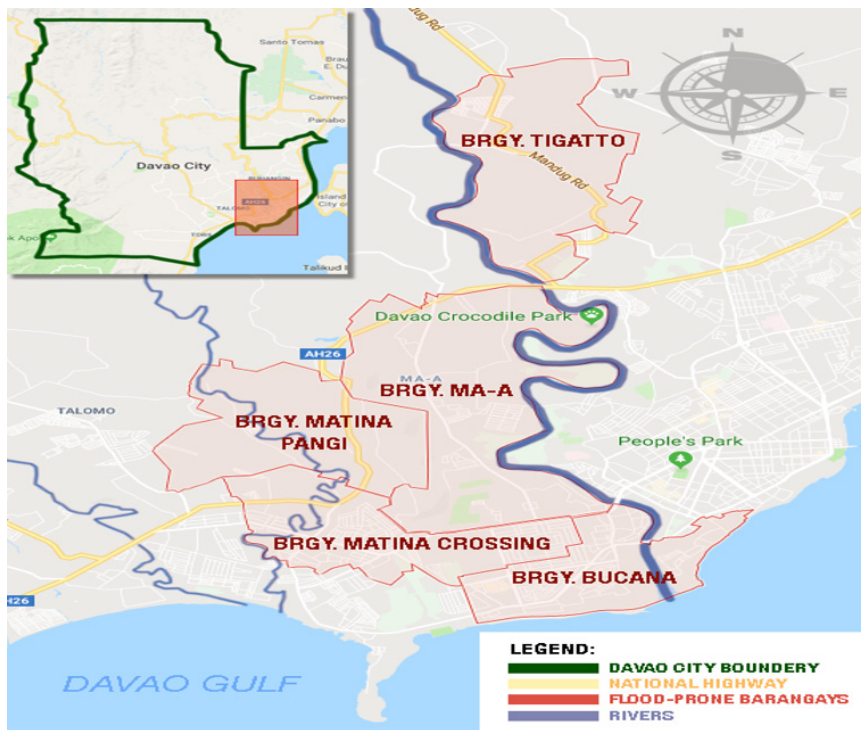
Extensive body of literature on disaster studies emphasize the role of risk communication (Bradley & Clarke, 2014; Comfort, et.al., 2004; Comfort, Ko and Zagorecki, 2004; Mercado, 2016; Pidgeon, Kasperson & Slovic, 2013; Kasperson, et. al., 1988; Kasperson, 1986) on disaster management towards risk reduction. However, studies on this aspect are mostly addressing the different stages of the disaster management cycle (Khan, Vasilescu & Khan, 2008) analyzing social vulnerabilities (Wisner, Gallard & Kelman, 2012; Gall, 2013) and/or operationalize models (Leelawat, et. al., 2015; Lazrus, et. al., 2016; Hocke-Mirzashvili, 2016; Dickens, 2012; Demeritt & Norbert, 2104; Cowles, 2015; Reynolds & Seeger, 2005) as intervention mechanisms, there is a lack of investigation that integrates risk communication and disaster management. The literature examined does not reflect an approach specifically on risk communication management for risk reduction. Hence,

this study will focus on risk communication management as an integration of risk communication and disaster management towards risk reduction strategy for flood vulnerable communities.

Ejeta (2018) stressed that past direct and indirect disaster experiences invoke preparedness intention and actual preparedness for flood hazards at individuals, communities and organizations levels. Even though the communities repeatedly experienced the flood disasters in the past, provision of information is needed on better emergency preparedness, particularly not only about the risk of flood hazards but also about the ramifications of flood disasters and the cost-effective methods of mitigation measures at the households' level (Grothman and Reusswig, 2006). Non-structural measures including establishment of communication channels between different communities to notify each other during the event of flood disaster, and the existence of flood disaster means of warning complement the structural measures like building of dams, dikes, levees, and channel improvements as means of mitigation measures (Ejeta, 2018). Grothman and Reusswig (2006) further explained that adoption of such non-structured measures is affected by residents' perceptions of previous flood experience, risk of future floods, reliability of public flood protection, the efficacy and costs of self-protective behavior, their perceived ability to perform these actions, and non-protective responses like wishful thinking.

There is a growing consensus among researchers and planners to incorporate local communities in disaster risk management and climate change adaptation planning (Forino, et. al., 2017; Kemp, Parto & Gibson, 2005; Koivisto & Nohrstedt, 2017; Kim, 2017), yet its actualization largely remains a dream (Pearce, 2003 cited in Samaddar, et al., 2015). Since it was observed that the Philippines, over the last decade, has been ranked 10th in the 2007 Global Risk Index (Harneling, 2008 as cited in dela Cruz, Ferrer & Pagaduan, 2010), it has been considered as one of the most vulnerable countries in the world due to the occurrence of recent severe disasters.

This study aimed to examine the vulnerability profile and flood experiences of the vulnerable communities of Davao City (see Figure 1) and analyze its contribution to their risk related behaviors. Findings of this study specifically in documenting the experiences, and responses to flooding of the community can be used by the local government units and agencies involved in disaster risk and reduction as inputs to their efforts in their implementation of reduction of flood risks. The results would also enhance the risk communication management of the local government units in addressing the needs and context of the flood vulnerable communities. Moreover, the results may be utilized by the Davao City council for possible policy recommendation that will highlight a community-based framework on risk communication management. irrelevant factors in the creation of content to ensure proper dissemination of news to the public.

Figure 1*Location Map of the Research Locale (DC-DRRMO)*

This paper is part of a study conducted using the Theoretical Frameworks on Social Amplification of Risk (Kasperson, et. al, 1988) and the Disaster Management Cycle (Khan, Vasilescu, Khan, 2008). Figure 2 shows the Conceptual Framework of the study while Figure 3 shows the Analytical Framework of the Methodology implemented. These frameworks cover the integration of the qualitative and quantitative analysis of the study using a Convergent Parallel Mixed method which aimed to propose a community based flood risk communication management framework appropriate for the flood vulnerable communities.

Figure 2
Conceptual Framework of the Study

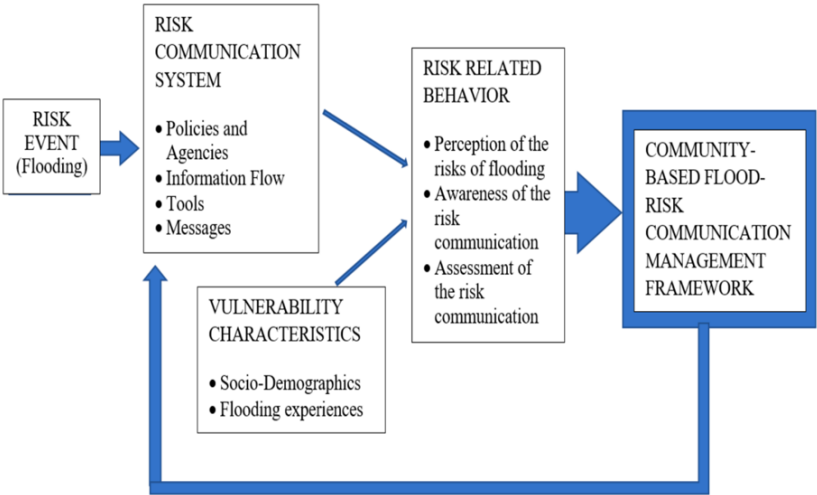
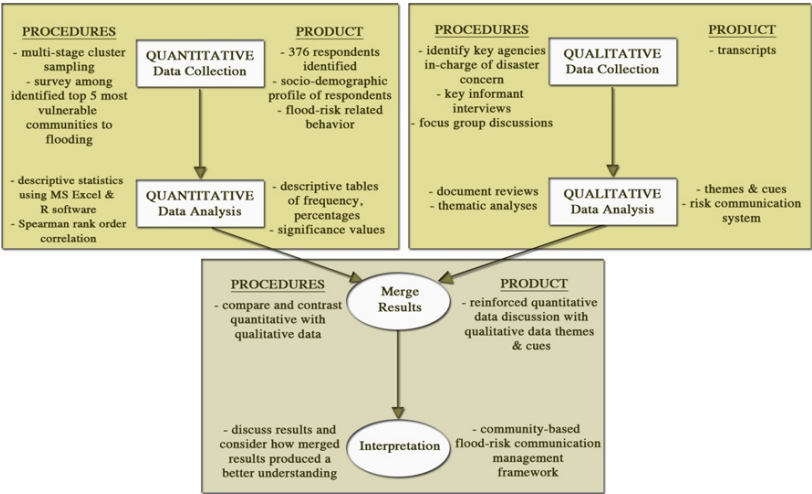


Figure 3
Analytical Framework Using a Convergent Parallel Mixed Method



FINDINGS AND DISCUSSION

Developing a Community-based Flood Risk Communication Management (CBFRCM) Framework for Flood Vulnerable Communities

The emphasis of this paper is the integration of the initial findings of this research which generally covers two major areas : (1) description of the actual and current communication systems of Davao City; and, (2) explanation of the respondents' flood experiences and practices to reduce vulnerability to flooding. These findings have implications on how to recommend an appropriate flood-risk communication and its management and envision the role of flood risk communications in developing resilience at the community levels.

The results of the study revealed that Davao City adopts a communication system that is compliant to the NDRRMP (2011) and the RA 10121 which utilized a top-down method approach in the implementation of its policies, structures, coordination mechanism and program implementation. O'Sullivan (2012) stressed that as long as the communication flow is only top-down, then no change is likely to happen. For risk communication to be translated into an effective disaster risk reduction strategy, community engagements must be encouraged. Moreover, external factors like political and social consequences and other social dynamics that lie within the government, key agencies and authorities, should be considered for a holistic transactional process (Terpstra, et al. 2009; United Nations, 2015; Forino, et. al., 2017). Moreover, results show that the communication systems and protocols of Davao City have little or no room for direct transactional interaction between the main source of the message, the NDRRMC and the local communities which are directly affected by flooding. In addition, messages or communication tools emanating from the original source have been found to be cascaded towards the lower level receivers without any alteration or modifications appropriate for the local residents. This has been confirmed by the respondents that the current set-up, although effective at some points, has disregarded their capacities to function and adapt as the primary actors.

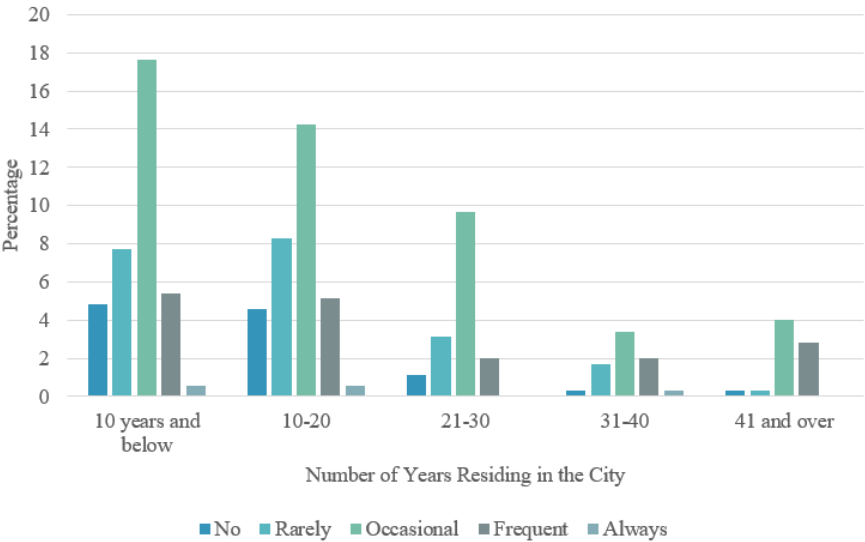
In terms of the residents' experiences and responses to reduce their vulnerability to flooding, Table 1 revealed that since there is limited grasp of the risk perception, the communities' perception of flood risks reflect that it is greatly associated with the perceived reasons for flooding.

Years of residence in the Area	FREQUENCY	PERCENTAGE	
0-10 years	127	36.0	
Above 10 years to 20 years	115	32.6	
Above 20 years to 30 years	57	16.1	
Above 30 years to 40 years	28	7.9	
Above 40 years to 50 years	17	4.8	
Above 50 years to 60 years	9	2.5	
Total	353	100.00	MEAN = 13
Ownership			
Owned	208	58.9	
Rent-free	94	26.6	
Rented	51	14.4	
Total	353	100.00	
House Type			
Improvised	223	63.2	
Single One storey	69	19.5	
Single Two-storey house	53	15.0	
Attached row house/apartment	8	2.2	
Total	353	100.0	
House material			
Mixed materials	249	70.5	
Concrete	64	18.1	
Wood	18	5.1	
Light materials (amakan)	22	6.2	
Total	353	100.0	

Moreover, that flooding is a recurring event in their locality (Figure 4). Thus, the flood vulnerable communities rely on their past experiences (see Table 2) in flooding (Revita, 2018) to address the situation and responds to the eventuality by creating their own adaptation strategies. These include closer monitoring of rainfall in the higher areas through weather reports, the social media, early warning system like the water level markings, alarm system and information relay among neighbors, barangay captains, zonal

leaders and others by word of mouth. However, this is only useful during the flooding incidences. The communities feel that they can still improve their preparedness and alertness level using a more sustained and context-specific approaches on awareness campaign specifically for flooding. Moreover, they would appreciate if they will become part of these initiatives utilizing the context of their experiences and adaptive strategies that they can share among them.

Figure 4
Percentage Distribution of Respondents by Number of Years Residing in the Area and Occurrence of Flooding



Similarly, in terms of the existing communication system, the respondents expressed that although *barangay* officials’ efforts are evident and appreciated by the flood vulnerable communities, there are still areas that need improvement to empower the individuals and the communities as a whole in building its resilience. Disaster risk reduction and management programs can be transformed from the current “top-down” to a localized and participatory approach by involving the community and making the individuals as the core of the risk communication approach in collaboration with the different sectors, agencies under the guidance of appropriate institutional mechanisms. Furthermore, the results also reflect that despite the efforts done by the *barangays* on awareness and preparedness for flooding, there are still some sectors of the community that are less likely to

receive the information for the reasons that (1) they have no time to attend seminars and trainings which are in conflict with their work schedule, (2) some of the residents do not have the opportunity to get the information through electronic channels of communication, i.e. FB and twitter, (3) others expressed that limited print out of brochures or flyers were disseminated in the households.

Table 2

Distribution of respondents by response of the households on flooding

RESPONSE	FREQUENCY*	PERCENTAGE
Time to Prepare		
When rain falls	147	48.20
When water levels are high	95	31.14
When the news says the weather is bad	89	29.18
When the community alarm rings	79	25.90
When authorities advise us to do so	31	10.16
When floodwater starts to enter the house	5	1.64
Total	446	
Reasons for preparations on flooding		
Safety of family and relatives	159	52.13
Aggressive programs of barangay	117	38.36
Personal experience	84	27.54
Neighbors are also preparing	35	1.48
Knowledge of flood risks	26	8.52
LGU initiatives	16	5.25
Total	437	
Reasons for Evacuation		
Safety of family	201	56.94
Personal/past experiences	125	35.41
Self-decision	47	13.31
Secure important items	25	7.08
Advise of barangay authorities	22	6.23
Neighbors are evacuating	21	5.95
Not relevant to our experience	10	2.83
Advise/messages	7	1.98
Sufficient knowledge on flood risks	6	1.70
Total	464	

*Multiple response

From the survey and the FGDs conducted, residents have revealed that although they are aware and appreciative of the efforts made by the barangay in terms of awareness and preparedness as well as response during flooding incidences, they would appreciate if they can also participate and give inputs on the DRR strategies based on their experiences and current adaptation practices. They perceived that taking part in the planning and crafting of the risk communication and its management would improve their preparedness and response mechanisms to flooding.

Thus, a community-based intervention is necessary whereby community perception, attitudes and behavior towards flooding as a result of their past experiences should be documented and highlighted as the major outcome from interaction between legislation, organizational policies and practice, collaborative and participatory actions that can be transformed into a community norm towards flooding incidences.

A More Integrated Flood Risk Communication Management Approach towards Risk Reduction

In the context of the Davao City's flood vulnerable communities (Basa, 2017; Boquiren, 2017; Bustillo, 2017; Carillo, 2015; DRRMO reports, ND; Figureoa, 2019; Revita, 2018) the approach to its risk communication must consider the integration of flood risk communication with the disaster management cycle. This approach reinforces various studies which revealed that flood risk management is greatly affected by different factors (Kreibich, et. al. 2005; Kreibich, 2011b) and the responses to flooding incidences are affected by changes in preparedness practices (Kreibich, et. al., 2011a; Helsloot & Ruitenber, 2004; Howard, et. al. 2017; Kerstholt, Duijnhoven & Paton, 2017), the flood vulnerable communities' adaptation practices to flooding are developed through time (Kreibich, et. al, 2017). Moreover, Thieken (2016) emphasized that: (1) flood risk awareness leads to precautionary actions if effective risk communication and management is implemented; (2) flood hazard information, precautionary measures and coping possibilities should be linked more effectively to provide a more context-specific approach; (3) timely and reliable warnings especially to low-lying areas should be given in the event of rainfall in the higher areas; and, (4) training of communities to ensure alertness and precision of flood responses should be encouraged.

In the current set-up of Davao City, the risk communication system is greatly influenced by the existing policies and frameworks in compliance to the RA 10121. Despite the fact that after the 2011 flashflood, the flooding incidents of 2013, 2017 and 2018 (DRRMO reports, ND; Bustillo, 2017; Boquiren, 2017) revealed that communities and agencies involved are better prepared and interoperability among agencies have been observed, the

residents of the flood vulnerable communities expressed that they would be more confident and secured if they can participate in the planning and operationalization of risk reduction strategies. Thus, there seems to be a gap in the implementation at the community level in terms of the lack of a “community-based” approach to empower the communities to practice “self-protection” and “independent coping strategies” (Thieken, 2016; Tselios & Tompkins, 2017). Moreover, survey respondents and FGD participants have expressed that they are willing to participate and provide inputs in the crafting of appropriate risk reduction strategies that will help them in improving their awareness, preparation and response to flooding incidences in their communities.

To address this, the following insights were derived from the results of the study as the guiding parameters in the proposed CBFRM framework:

The findings of this study is consistent with findings from other disaster studies which emphasized the significant role of risk communication (Comfort, et.al., 2007; Mercado, 2016; Pidgeon, Kasperson & Slovic, 2010; Kasperson, 1988; Terpstra, Lindell & Gutteling, 2009; Lindell & Perry, 2012; Duckett & Busby, 2013). Disaster risk reduction (DRR) strategies in this context can be enhanced through proper knowledge development and dissemination of flood-risk communication from the different stakeholders that would eventually implement the strategies presented therein. Consequently, focusing on how the communication tools and messages can be made more relevant to the target recipients (Lindell & Perry, 2004). Effective communicative processes and practices are widely regarded as core to disaster and risk management (Howard, et. al., 2017; Bradley & Clarke, 2014; Clerveaux, Katada & Hosoi, 2009; Cole & Fellows, 2008; Houston, 2018), however, the need for coordination and integration equally play a significant role (Comfort & Kapucu, 2006; Kubicek, Cimander & Scholl, 2011).

Results of the study also revealed that Davao City’s flood vulnerable communities are resilient since the communities have the capacity to “bounce forward” following an adverse event such as a flooding disaster or crisis (Houston, 2018; Maxey, Casas & Abat, 2013; Rufat, et.al., 2015). However, majority of the respondents are hopeful that they can improve their strategies if they are properly guided and educated about flooding, the risks involved and the appropriate preparation steps that they need to know. Norris et al (2007) states that as different models of community resilience have emphasized various adaptive capacities that contribute to collective recovery, capacities of information and communication, community competence and social capital as crucial to community resilience (Australian Red Cross, 2013; Daniel & Meyer, 2015). Ultimately, due to the

collective nature of community resilience, communication is a core concept that cuts across other components or elements of the *complex adaptive systems* (Comfort, et al. 1999; Dickens, 2012). O'Neill (2004) argues that from a risk communication perspective, both individual and community concerns must be recognized as components of community resilience. As such, it also recognizes that communities and organizations operate as networks and groups rather than as discrete individuals. Thus, instead of focusing only on the implementation of the disaster risk management through the agencies involved, a risk communication on a localized and participatory approach is being envisioned by the flood vulnerable communities.

Modifications in the Social Amplification of Risk Framework as Theory Contribution

A critical prerequisite to effective disaster management is the minimization of related impacts through communication of risk information in a timely manner and in a format that all stakeholders can understand. Attaining this mandate can be a major challenge for disaster managers, especially in an increasingly globalized world characterized by higher levels of multi-culturalism as increasing numbers of people migrate to locations outside their culture-zones where, not only language differs, but also perceptions of and attitude towards hazard/disaster risk (Martin, 2003). The challenge for disaster managers is therefore to design effective tools/strategies that not only span language differences, but also take into consideration cultural perceptions and attitudes so that the objectives of disaster risk-reduction can be achieved. Moreover, it is also best to explore the community based adaptation measures to building more resilient communities as it is 'a community-led process, based on communities' priorities, needs, knowledge and capacities, which should empower people to plan for and cope with the impacts of climate change' (Reid, 2015) and ultimately makes community more resilient to natural disasters and enable them to pursue dynamic future despite the challenges of these disasters.

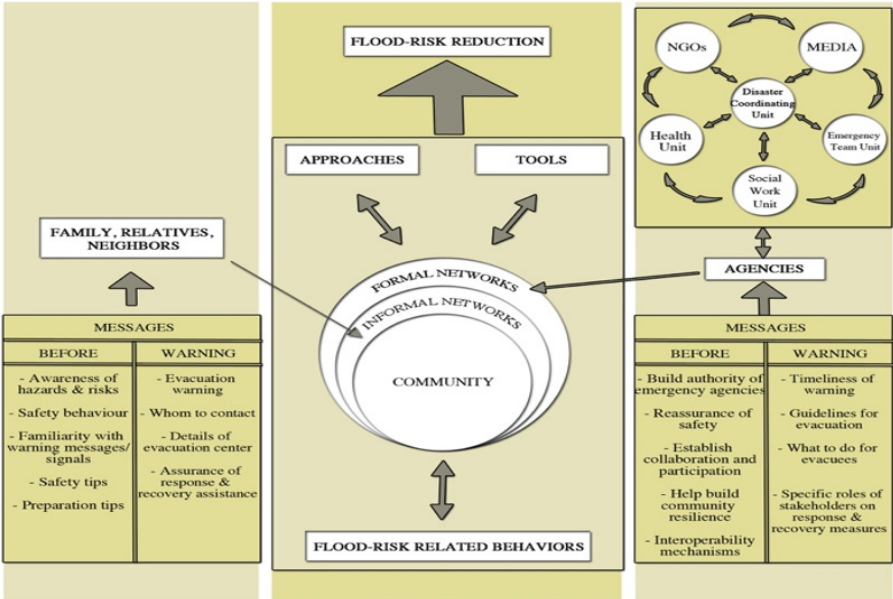
The Social Amplification of Risk Framework (SARF) of Kaspersen, et. al. (1988) is primarily uni-directional or linear as it reflects only the role of the integration of risk assessment with the psychological, sociological and cultural perspectives of risk perception and risk related behavior. However, the amplification only involves the level of the source of message and considered the receivers as end-user of the risk messages. It therefore lacks the elements of a community based and networked integrated elements necessary for risk event.

Since results of this study revealed that the practice of the communication systems on flood risk is top-down approach and have some areas that can be improved by engaging the communities, a localized and participatory strategy is encouraged. Respondents of this study expressed

that sharing of best practices and their experience in flooding can be on strategy to strengthen the awareness and preparedness level among them. Hence, the same strategy as espoused by the Canadian guide to effective flood risk communication (Mackinnon, Heldsinger & Peddle, 2018) can be adopted to address the SARF model’s integration of the community as the amplifier or attenuator of the risk messages instead of the concerned agencies. It is hoped that an interactive collaboration would translate into a more appropriate and effective flood-risk communication management for Davao City.

Utilizing the results of this research from the concerned agencies and the communities’ awareness and assessment of the communication systems and the perception, behavior and experiences of the flood-vulnerable communities provided the inputs on how to design and develop a risk communication management appropriate for the context of Davao City. Figure 5 shows the study’s modification in the SARF focusing on a *Community-based Flood-risk Communication Management (CBFRCM)*.

Figure 5
Community-based Flood Risk Communication Management (CBFRCM) Framework



The following significant gaps were considered in the proposed CBFRCM framework:

- (1) The current communication systems implement a “top-down” approach and the feedback mechanism is weak or very limited.
- (2) The concerned agencies, which, may serve as the “amplification channels” can tailor-fit the risk messages according to the context of its target recipients.
- (3) The ripple effect as presented by SARF shows that the extent of reach does not transcend towards the household levels.
- (4) Risk perception and awareness of risk messages may be present, but the preparedness level of the communities can be attributed to the experiences that they had on flooding.
- (5) Assessment of the risk communication systems was significantly based on their familiarity of the communication tools as sources of information on flooding.

The Flood-Risk Amplification Communication Theory (FRACT)

The *Flood Risk Amplification Communication Theory* (FRACT) as a contribution to the studies on amplification of risk in communication management reflected in Figure 6 recommends that the community becomes the main actor in the amplification of risk. Hence, a shift from event centered to people centered approach. The flood-risk behaviors of the communities serve as the major source of the messages involving the integration of all the stakeholders into a strategic risk communication approach towards flood-risk reduction. Moreover, it also involves the interdependent transactional process among the following elements:

This study recommends a risk communication management approach which accounts for the integration of the findings of the examination of the current risk communication system as well as the awareness and perception of the flood vulnerable communities toward the risk reduction efforts from the national, regional and local levels. Moreover, the assessment of the flood vulnerable communities of these efforts which reflects the “gap” in terms of the localize and participatory approach.

FRACT integrates the gaps both in the literature and the needs of the flood vulnerable communities in the context of flood risk reduction concerns. The theory is proposed based on the following areas of concern:

(1) *Underlying principles*

Institutional Mechanism. This includes the policies or legal basis of the agencies task/function, the communication protocols or procedures, and the flow of communication and the expectations of both the organization and the community. Institutional structures and mechanisms for inclusive disaster risk governance can be achieved through participatory processes that can lead to a participatory and collaborative policy making which involves the government institutions, stakeholders and the affected communities.

Alternative Policy Recommendations. Three areas for policy recommendation for a “localized” DRR communication interventions include: (a) creation of the working group to do further research and craft a synthesized reception analysis of the current risk communication system among the 63 flood vulnerable communities; (b) crafting of the manual of protocols for a quick reference guide for all the stakeholders; and, (c) include in the communication plan the period of implementation and the appropriate evaluation and monitoring of the strategies.

(2) *Guiding parameters*

(a) Balanced and coordinated strategies for reducing risk and coping with impacts of flooding should emanate from the community levels towards the different agencies involved, involving a simultaneous approach of “top-down”, “bottom-up” as well as horizontal communication flow to encourage a transactional communication process among all the involved sectors.

(b) Transboundary and cross-sectional cooperation should be encouraged. Risk reduction and disaster response must be coordinated among various stakeholders and concerns must be systematically identified and anchored in flood-risk management plans that clearly defines the context-specific concerns of the communities.

(c) A localized and participatory approach must encourage the involvement of the communities, in particular, encourage risk dialogue to enable local interests, experiences and knowledge to be integrated into locally adapted risk management strategies.

(d) Formulation of binding regulations or policies for incorporating the community concerns in the planning process to enhance coping mechanisms and capacities.

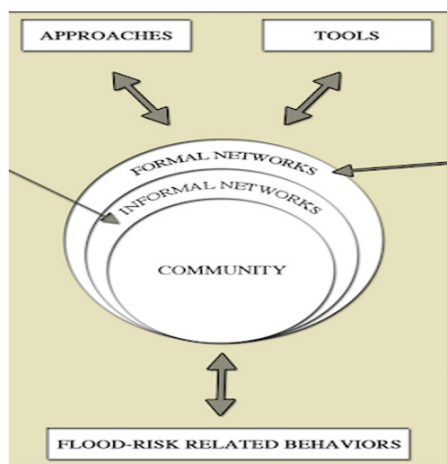
(3) *Elements of the proposed theory*

Goal towards Flood-risk Reduction. A community-based approach accounts for the implementation stage utilizing a multi-lateral knowledge

development approach combined with the interoperability or the dynamic interconnections between and among the agencies involved as well as the inclusion of the community and individuals in the process.

Figure 6

Flood-Risk Amplification Communication Theory (FRACT)



The findings of this study revealed that local residents of the flood-vulnerable communities had experiential knowledge on flooding that has helped them create practices to reduce vulnerabilities, it can become a useful tool in crafting the risk communication appropriate in the context of the flood-vulnerable communities. An effective output that can be developed from a multi-lateral knowledge development is the creation of an integrated Early Warning System (EWS) at the community levels. The risk communication infrastructure would address the appropriate tools for specific audiences and identify the effective interaction among the main actors such as the scientific community, decision makers, stakeholders, the public and the media. Close coordination between the community, the experts and other concerned groups should work towards a “tailor-fit” and specific approach using the multi-lateral knowledge development approach.

The following elements can be utilized in the operationalization of the Flood-Risk Amplification Communication Theory (FRACT) towards community-based disaster risk reduction:

- (a) Strategic risk communication aimed towards flood risk reduction

Strategic risk communication can be defined as a “purposeful process of skillful interaction with stakeholders supported by appropriate information” as an essential component of integrated risk management. It can help decision-makers and stakeholders make well-informed decisions leading to effective risk management. Results of the study show that interoperability among agencies is the focal emphasis on disaster management, however, there is still a lack of risk communication management which aims to address the integration of risk communication with disaster management. Since risk communication is described as “an interactive process of exchange of information and opinion among individuals, groups and institutions about the nature of risk, people’s perceptions, and actions that can be taken to deal with the risks” (Kafle & Murshed, 2006), it would be beneficial if this can be a replicated approach in all the stages of the disaster management cycle. In this context, the dynamic interconnections between and among the “amplification stations” involved as well as their specific role in the communication process and organizational linkages will be considered central to the implementation of the strategic triad which would consider both the reach of the information and the appropriate approach and tools to be used including the channels and messages therein.

(b) Stakeholders which include the *community*, the formal and informal social networks as major actors of the risk communication process: informal social networks includes family-relatives and neighbors; while the formal social networks involves the different agencies including the disaster coordinating unit, the mass media; emergency team units; social work unit; health unit and NGOs

(c) Flood-risk related behavior reflecting the lessons from the experiences and practices of the communities that can be shared among the stakeholders.

The individual’s risk perception revealed in this study is influenced by the experiences in flooding and therefore creates self-imposed behaviors and responses to flooding incidences. Cantrill (2011) emphasized that the role of individual perceptions is the result of overlapping sets of cognitions, both arising from experience that create the person’s personal vision of their role and connection to the environment. This can provide dynamic and integrative perspective for understanding the relationship between psychological predispositions, social interactions and the perception on a local level. Thus, it can serve the value of consciousness of local citizens to cooperate with others to achieve desired outcomes. Moreover, Weinstein (1989) viewed that personal experience is widely believed to have a powerful impact on the recognition of risk and the willingness to take extra precautions. The

interest in prevention that seem to follow disasters is viewed as evidence of the effects of experience. O'Neill (2004) has also noted that several studies have highlighted the role of personal experience of disasters as a driver of heightened risk perception, thus, creates self-protective behaviors. This is also supported by scholars like Krinsky and Plough (1988) who observed that the perception of threats must be viewed as social construction and the social amplification of risk (Kasperson, 2001; Pidgeon, Kasperson and Slovic, 2003) and suggested that individuals encounter interpersonal or mass-mediated account that heighten or diminish the significance of an issue.

(d) Approaches in the strategic risk communication

This would account for the integration of the lessons from the community-based interaction and the strategies for implementation of the communication plan which includes the information flow, multi-lateral knowledge development (Okada, Norio, Matsuda, 2005) and the interoperability (Boquiren, 2017) mechanisms highlighting the integration of communication, control and coordination (Comfort, 2007). Strategically, it would be beneficial that the community's perception, experience and best practices on flooding be made as part of the "technical" communication coming from the concerned agencies, highlighting the gaps and addressing the misconceptions if there are any. This would show how much is their awareness and perception of risk as well as their personal preparedness level on flooding. This however, should be done based on consultative and interactive process, thereby engaging the community in the crafting of the flood-risk messages and risk reduction management.

(e) The communication tools which highlights a study of appropriateness of specific tools for specific target audience. Communication is very essential in risk reduction and management and may utilize different channels and tools such as written tools in the form of posters, brochures and flyers; visual tools such as signages, billboards and directional signages; technology-based tools like GIS, internet, and mobile phones; mass media to include television and radio as well as face-to-face communication through trainings, seminars, drills and word-of-mouth. Comfort (2007) states that in emergency management practice, it has focused on the interoperability of mechanical devices such as hand-held radios, cellular phones and landline or telephone networks. However, Clerveaux, Katada and Hosoi (2009) mentioned that in some situations, electronic devices may not be appropriate, thus, relay of messages during disaster response can be disseminated through the use of other devices such as loudspeakers, mobile patrol sirens, or oral communication by word-of-mouth among the residents.

- (f) Flood-risk messages to account for the significant messages that would address the specific contexts and needs of the informal as well as the formal social networks.

In the context of this study, results show that risk communication has been seen as a system to be implemented ensuring the interoperability of the agencies but disregarded the contribution that may be given by the affected communities based on their experiences. This puts emphasis on the idea that conceptualizing the best way to communicate risk have changed over time, specifically, in regard to the incorporation of the individuals and the community in the risk communication process. Feldman, et. al. (2016) viewed that previous risk communication was seen mostly as a one-way form of communicating with the public being regarded as the recipient of the information based on the expert's view as the salient point of the risk message. However, studies have also shown that gaps in reception were due to the difference of perception of risk between experts and the public (Okada & Matsuda, 2005; Feldman, 2016; Oh, Okada & Comfort, 2014). Thus, it is crucial for a risk communication to consider its audience and encourage a participatory framing of the strategies and tools.

FRACT as a *proposed theory* is aimed towards community safety in the events of flooding which encourages community self-reliance, long-term community-based programs that is context-specific. This theory recognizes that people have varied perceptions on risk and adaptive measures and encourages prior assessment of existing knowledge and practices as inputs to the crafting of the flood risk communication management approach. While Figure 5 shows the community-based flood risk communication management framework, adopting the SARF model (Kasperson, et. al., 1988; Renn, et. al., 1992; Renn, 1991, Renn, 2011) to highlight the different stages of the process, Figure 6 highlights the following modifications in the Social Amplification of Risk Framework (SARF), specifically : (1) the community becomes the central focus of the amplification then extends its reach to the informal and formal networks; (2) strategic risk communication triad is highlighted to cover the element of flood risk related behavior which includes the lessons and responses in flooding experiences as major factor in message development, utilizing the approaches and tools to strategize the flood-risk communication towards the target audience. The modification in the SARF is the integration of the community-based inputs like the community's perception of risk, experiences on flooding, awareness of the communication systems, their attitude and assessment and their practices. As the results of the study show that the extent of reach as to the barangay level only covers level of officials of the barangay, it should be part of the proposed theoretical framework that the community level should be considered as the sources of information as regards their experiences and adaptation practices on flooding incidences. The central element, then, would be the individuals at the community level who amplify the experience through an integrated amplification system which integrates the

amplification stations with the “ripple effect” or reach of the community’s flood experiences and practices to include the informal social networks (family, relatives, neighbors) as well as the formal social networks (opinion leaders, different volunteer groups, media and non-government agencies). From this, a strategic triad for risk communication would determine the appropriate messages that are context-specific to the different vulnerable communities reflecting the lessons based on the experiences and its role in the communication planning that would account for the selection of the approaches and tools. The information mechanisms involved shall be coupled with the selection of the appropriate communication messages that will be utilized in the communication materials. This, however should be guided by the institutional mechanisms that have been crafted integrating the local communities’ context, dynamics and capacities. The strategic risk communication can be utilized for the risk reduction and management at the community levels, utilizing the interoperability of the agencies involved and inclusion of the BDRMCs who implements the strategies, monitor its outcomes and gather feedbacks at the level of the communities. Compared to the original SARF which has a linear “top-down” communication system, the proposed theoretical framework will generate its information system from the community’s inputs as to their reception of the risk messages, awareness of risk, their flooding experiences and their level of preparedness.

The study revealed that despite the “ripple-effect” at the social amplification stations, the individual is not considered as a major element in the social amplification of risk framework which is contrary to most researches on risk amplification which focused on the social components of the framework. It does not consider that the individual can provide significant contribution for amplification in the process. The respondents’ direct experiences on flood risks increases memorability and imaginability of the hazard, as well as provide feedback on the nature, extent and manageability of the hazard, creating better perspective and enhanced capability to avoid the risk. Thus, it can serve as a risk amplifier as well as act to attenuate risk.

The *Flood-Risk Amplification Communication Theory* (FRACT) in Figure 6 also highlights the modification in the amplification process of SARF which can be a guide to address the following concerns found to be absent in the current communication system of Davao City: the lack of communication protocols at the barangay level; the insufficiency of communication approaches; failure to involve all the affected residents; and the lack of coordination and management on communicating flood risk. The respondents expressed that the current set-up of risk communication can still be improved in terms of its strategies and management since more people are living in flood-prone areas and risk of flooding increases due to climate change and urbanization, hence, it is increasingly important to communicate flood risk to the public (Haer, Boltzen and Aerts, 2016). Nyondo in 2006 (as cited in Skinner & Rampersad, 2014) also emphasized

that if the process of communication is difficult in our ordinary and daily lives, it is far more so in times of disaster (Hocke-Mirzashville, 2016). The challenge remains to not only respond with accurate, understandable and complete information as quickly as possible during a disaster, but also to communicate in a proactive way that involves members of communities to reduce the potential risk of a disaster.

Ensuring that risk reduction and management at the community levels is achieved for the flood vulnerable communities of Davao City, the risk communication management approach should consider the integration of flood risk communication integrated with the disaster management cycle. The approach used in designing the proposed framework has the following objectives:

- (1) Empower the communities to work towards self-reliance specifically on flooding eventualities.
- (2) Create interoperability at the levels of the community.
- (3) Build community capacity and preparedness through a more sustained risk communication management.
- (4) Engage community participation and develop strategies that are context-specific.
- (5) Deliver programs that can address flood risk communication as well as disaster management in an integrated and complementary approach.

CONCLUSION

The flooding experiences of the flood vulnerable communities in Davao City have provided the residents the adaptive measures to respond to flooding occurrences that they seem fit to be appropriate. Some of these community strategies (Mayhura, ND) included the following preparations whenever there is threat of flooding: (1) food storage in case they are stranded at the second floor of their house; (2) packed necessities in the event of evacuation; (3) elevating electronic appliances to protect from flooding; and, (4) evacuation first of the children and senior citizens to safer areas even prior to evacuation orders by the LGUs. Moreover, the male members of the household in most cases of evacuation decided to stay for the security and protection of their properties and belongings. The respondents, however, expressed that a more sustained risk communication may help improve the risk reduction strategies at the community level for a more coordinated response to flooding occurrences.

The lack of a standardized or structured management of both risk communication and disaster response translates into poor communication interaction during and after a flooding incident happens. This is observed during the 2011 flashflood incident which resulted to 29 fatalities and destruction of properties in the Matina area (Cayamanda & Lopez, 2018). Thus, a more defined and clear flood risk communication management may help define the specific protocols that can improve the coordination and flooding responses at the community level.

IMPLICATIONS AND RECOMMENDATIONS

A proposed community-based flood risk communication management (CBFRCM) framework may address the gaps and standardize localized approach to specific contexts of the flood vulnerable communities. It may also help identify the key persons that can help plan and strategize appropriate communication messages and tools in collaboration with the residents, coordinate and manage the preparedness and response strategies to reduce risk and ensure that management, coordination and interoperability is observed at the community level. The framework can also address the limitation of SARF which covers only the risk-centered approach to amplification and has been observed as a linear approach to the communication of flood risks.

Consequently, the Flood Risk Amplification Communication Theory (FRACT) is proposed as a modification in the Social Amplification of Risk Framework, utilizing a community-based, localized and participatory approach. This will address the limitation of the current SARF as a linear approach towards a shift from a risk-oriented to people-centered focus of amplification. The community becomes the main source of amplification, utilizing flood-risk behavior as part of the message development with the integration of all the stakeholders into a strategic risk communication approach towards flood risk reduction.

It is, however, recommended that the proposed Flood Risk Amplification Communication Theory be utilized to test the feasibility of the modification of SARF. Moreover, the planning and crafting of the details of the program should entail the adoption of the following reminders:

- Flood risk communication planning cycle should be present in every stage of the disaster management cycle.
- The objectives of the communication plan should be dependent on the context of the community and its target audience.
- To ensure effective implementation of the flood risk communication, it is imperative that human and material

- resources are sufficient and adequate.
- Resources and activities are dependent on the following functional areas: research, monitoring and evaluation, policy matters, media placement, training and capacity building and community-based education and development activities.

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REFERENCES

- Australian Red Cross. (2013). Relationship matter: the application of social capital to disaster resilience. National disaster resilience roundtable report. 20 September 2012.
- Auzzir, ZA., Haigh RP & Amaratunga D. (2014). "Public-Private Partnerships in disaster management in developing countries: a conceptual framework". *Procedia Economics and Finance* 18:807-814. www.sciencedirect.com
- Bacamas, ES. (2018). Editorial – The economic cost of disasters. *The Philippine Star*. <https://www.philstar.com/opinion/2018/10/14/1859844/editorial-economic-cost-disasters>
- Basa, M. (2017). Over 31,000 affected by flooding in Davao City. *Rappler*. <https://www.rappler.com/move-ph/issues/disasters/192067-hundreds-davao-city-residents-evacuate-river-overflows>
- Boquiren, AL. August 2017. Personal Interview.
- Bradley DT, Mcfarland M, & Clarke M. (2014). The Effectiveness of Disaster Risk Communication: A Systematic Review of Intervention Studies. *PLOS Currents Disasters*. 2014 Aug 22. Edition 1. <https://doi.org/10.1371/currents.dis.349062e0db1048bb9fc3a3fa67d8a4f8>.
- Bustillo, RC. September 2017. Personal Interview.
- Cantrill, JG. (2011). The role of a sense of self-in-place and risk amplification in promoting the conservation of wildlife. *Human Dimensions of Wildlife*, Vol 16(2), pp. 73-86. <https://www.tandfonline.com/doi/full/10.1080/10871209.2011.542555>
- Carillo, CA. (2015). Flood risks in Davao City. *Business World Online*. <http://www.bworldonline.com/content.php?section=Nation&title=flood-risks-in-davaocity&id=108448>
- Cayamanda, KJG & Lopez, MA. (2018). Community Resilience to urban flooding: A Case Study of the 2011 Flashflood in Matina, Davao City, Southern Philippines. Paper presented at the 2018 South East Asia Disaster Risk Governance Academic Seminar, 24-25 September 2018, Bangkok, Thailand, Conference Refereed Proceedings.
- Clerveaux, V, Katada T & Hosoi K. (2009). Information Simulation Model: Effective Risk Communication and Disaster Management in a Mixed Cultural Society, *Journal of Natural Disaster Science*, 2009, Volume 30, Issue 1, Pages 1-11, Released April 17, 2009, Print ISSN 0388-4090, <https://doi.org/10.2328/jnds.30.1>.
- Cole, TW. & Fellows, KL. (2008). Risk Communication Failure: A Case Study of New Orleans and Hurricane Katrina, *Southern Communication Journal*, 73:3, 211-228, <https://doi.org/10.1080/10417940802219702>.
- Comfort, LK. et. al. (1999). "Reframing disaster policy: the global

- evolution of vulnerable communities". Environmental Hazards Human: and Policy Dimensions. www.earthscan.co.uk/journals/ehaz.
- Comfort, LK. & Kapucu, N. (2006). "Inter-organizational coordination in extreme events: The World Trade Center attacks, September 11, 2001. *Nat Hazards* 39:309-327.
- Comfort, LK, Ko, K. & Zagorecki, A. (2004). Coordination in Rapidly Evolving Disaster Response Systems. *American Behavioral Scientist*, Vol. 48(3): 295-313. <https://doi.org/10.1177/0002764204268987>.
- Comfort, LK. (2007). Crisis Management in Hindsight: Cognition, Communication, Coordination and Control. *Public Administration Review*, Special Issue, December 2007, pp. 189-197.
- Cordero, T. (2018). Typhoons and flashfloods cost the Philippines P6.446B in 2017. GMA News Online. <https://www.gmanetwork.com/news/money/economy/657532/typhoons-and-flashfloods-cost-the-philippines-p6-446b-in-2017/story/>
- Daniel, AP. & Meyer, MA. (2015). "Social Capital and Community Resilience". *American Behavioral Scientist*. Vol. 59 (2), 254-269.
- Davao City Disaster Risk And Reduction Management Office (DRRMO) REPORTS. (ND). Davao City Government Files
- Dela Cruz, LP, Ferrer, EM & Pagaduan, MC (eds.) (2010). Building Disaster-Resilient Communities: Stories and Lessons from the Philippines. CSWCD-UP.
- Dickens, PM. (2012). Facilitating Emergence: Complex Adaptive Systems Theory and Shape of Change. Dissertations & Theses. <http://aura.antioch.edu/etds/114>.
- Duckett, D & Busby, J. (2013). Risk amplification as social attribution. *Risk Management*. 15. 10.1057/rm.2013.2.
- Ejeta, LT. (2018). Community's Emergency Preparedness for Flood Hazards in Dire-dawa Town, Ethiopia: A Qualitative Study. *PLoS Curr*. 2018 February 21; 10.
- Feldman, D, et.al. (2016). "Communicating flood risk: Looking back and forward at traditional and social media outlets." *International Journal of Disaster Risk Reduction* 15:43-51.
- Figureoa, A.V. (2019). Fast Backward: 1916: the year Davao town was under water. Edge Davao . <http://edgedavao.net/vantage-points/2017/03/15/fast-backward-1916-year-davao-town-water/>
- Forino, G. et. al. (2017). Climate Change Adaptation and Disaster Risk Reduction Integration; Strategies, Policies and Plans in three selected Australian Local Governments. *International Journal of Disaster Risk Reduction*. Volume 24, September 2017, pp 100-108.
- Grothmann, T. & Reusswi, F. (2006). People at Risk of Flooding Why Some Residents Take Precautionary Action While Others do not. *Natural Hazards* (2006) 38: 101-120.

- <https://doi.org/10.1007/s11069-005-8604-6>. Springer.
- Haer, T., W.W. Botzen & Aerts, J.C. (2016). The effectiveness of flood risk communication strategies and the influence of social networks – insights from an agent-based model. *Environmental Science & Policy*, 60, 44-52.
- Helsloot, I. & Ruitenbergh, A. (2004). “Citizen Response to Disasters: a survey of literature and some practical implications”. *Journal of Contingencies and Crisis Management*. Vol 12 (3):98-111.
- Hocke-Mirzashvili, TM. (2016). Social Amplification of Risk Framework applied to hurricane Katrina and hurricane Rita. https://serc.carleton.edu/integrate/workshops/risk_resilience/case/82047.html
- Howard, A., et. al. (2017). “They’ll tell us when to evacuate”: The experiences and expectations of disaster-related communication in vulnerable groups. *International Journal of Disaster Risk Reduction*. <http://dx.doi.org/10.1016/j.ijdr.2007.03.002>.
- Houston, J.B. (2018). Community resilience and communication: dynamic interconnections between and among individuals, families and organizations. *Journal of Applied Communication Research*. Vol 46 (1), pp. 19-22.
- Kafle, SK. & Murshed, Z. (2006). Community-based Disaster Risk Management for Local Authorities. ADPC: Bangkok, Thailand. <http://www.adpc.net/v2007/Programs/CBDRM/Publications/Downloads/Publications/curriculum-cbdrm.pdf>
- Kasperson, RE. (1986). Six Propositions on Public Participation and their relevance for Risk Communication. *Risk Analysis* Vol. 6(3) <https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1539-6924.1986.tb00219.x>
- Kasperson, RE. (2001). Environmental Change and State Response. *International Encyclopedia of the Social and Behavioral Sciences*, pp. 4592-4596. www.sciencedirect.com / <https://doi.org/10.1016/B0-08-043076-7/04175-9>
- Kasperson R.E., et. al. (1988). The Social Amplification Risk: A Conceptual Framework. *Risk Analysis* 8:177-187. <https://doi.org/10.1111/j.1539-6924.1988.tb01168.x>
- Kemp, R, Parto, S. & Gibson, R. (2005). Governance for sustainable development: moving from theory to practice. *International Journal of Sustainable Development*. 8. 10.1504/IJSD.2005.007372. https://www.researchgate.net/publication/5107694_Governance_for_sustainable_development_moving_from_theory_to_practice
- Kerstholt, J, Duijnhoven, H. & Paton, D. (2017). Flooding in The Netherlands: How people’s interpretation of personal, social and institutional resources influence flooding preparedness. *International Journal of Disaster Risk Reduction*. Vol 24, September 2017, pp. 52-57. <https://doi.org/10.1016/j.ijdr.2017.05.013>.

- Khan, H, Vasilescu, L. & Khan, A. (2008). "Disaster Management Cycle: A Theoretical Approach."
- Kim, C., Nakanishi, H., Blackman, D., Freyens, B., Benson, A.M. (2017). "The effect of social capital on community co-production: Towards community-oriented development in post disaster recovery". www.sciencedirect.com
- Koivisto, JE. & Nohrstedt, D. (2017). A policymaking perspective on disaster risk reduction in Mozambique. *Environmental Hazards* Vol. 16(3), pp 2010-227. <http://dx.doi.org/10.1080/17477891.2016.1218820>
- Kreibich, H., et. al. (2011a). Recent changes in flood preparedness of private households and businesses in Germany. *Regional Environmental Change* 11(1):59-71. <http://dx.doi.org/10.1007/s10113-010-0119-3>
- Kreibich, H., Christenberger, S. & Schwarze, R. (2011b). Economic motivation of households to undertake private precautionary measures against floods. *Natural Hazards and Earth System Sciences* 11:309-321. <http://dx.doi.org/10.5194/nhess-11-309-2011>
- Kreibich, H., Thieken, A.H., Petrow, T.H., Muller, M., & Merz, B. (2005). Flood loss reduction of private households due to building precautionary measures - lessons learned from the Elbe flood in August 2002. *Natural Hazards and Earth System Sciences* 5:117-126. <http://dx.doi.org/10.5194/nhess-5-117-2005>
- Kreibich, H, et. al. (2017). Adaptation to flood risk: Results of international paired flood event studies. *Earth's Future*, Vol. 5, Issue 10. Accessed through <https://doi.org/10.1002/2017EF000606>
- Krimsky, S. & Plough, A. (1988). *Environmental Hazards: communicating risk as a social process*, New York, NY: Auburn House.
- Kubicek, H, Cimander, R & Scholl, H. (2011). *Organizational Interoperability in E-Government - Lessons from 77 European Good-Practice Cases*. <https://www.researchgate.net/publication/220692861>
- Lasco, R.D. et al. (2009). Mainstreaming adaptation in developing countries: The Case of the Philippines. *Climate and Development*, 1(2). 130-146.
- Lazrus, H., Morss, RE, Demuth, JL, Lazo, JK & Bostrom, A. (2016). "Know what to do if you encounter a flashflood": Mental model's analysis for improving flashflood risk communication and public decision making. *Risk Analysis*, 36(2), 411-427.
- Leelawat, N., A. Suppasri, S. Kure, C.J. Yi, C.M.R. Mateo & F. Inamura. (2015). "Disaster warning system in the Philippines through enterprise engineering perspective: A study on the 2013 Super Typhoon Haiyan." *Journal of Disaster Research*, 10(6), 1041-1050.
- Lindell, MK & Perry, RW. (2004). *Communicating environmental risk in multiethnic communities* (Vol. 7). Sage publications.
- Lindell, MK & Perry, RW. (2012). "The protective action decision model:

- theoretical modifications and additional evidence." *Risk Analysis: An International Journal* 32, No. 4:616-632.
- Mackinnon, J., Heldsinger, N. & Peddle, S. (2018). *A Community Guide to effective flood risk communication: Promoting personal preparedness*. Waterloo, Ontario: Partners for Action.
- Magalang, M.R. (2010). "Mainstreaming DRR and CCA in Mandatory Planning and Budgeting Processes of Barangays: A Case Study on Building Disaster-resilient Communities in Marinduque". *Building Disaster-Resilient Communities: Stories and Lessons from the Philippines*. Quezon City, Philippines: CSWCD-UP.
- Martin, LF. (2003). *Cultural Differences in Risk Perception: An Examination of USA and Ghanaian Perception of Risk Communication*. MSc. Thesis. Virginia Polytechnic Institute and State University.
- Maxey, CRA., Casas AC. & Abat, RPS. (2013). Floods displace 5,000 families in Davao. <https://www.sunstar.com.ph/article/265759>.
- Mayhura E. (ND). *Community Strategies to Enhance Flood Risk Communication in the Zambezi Valley, Zimbabwe*. Geography Department Bindura, University of Science Education.
- Mercado, R. (2016). "People's Risk Perceptions and Responses to Climate Change and Natural Disasters in BASECO Compound, Manila, Philippines". *Procedia Environmental Sciences*. 34. 490-505.
- NDRRMP Manual 2011-2028. (2011). http://www.ndrrmc.gov.ph/attachments/article/41/NDRRM_Plan_2011-2028.pdf
- Norris, F. H., Stevens, S.P., Pfefferbaum, B., Wyche, K.F., & Pfefferbaum, R.. (2007). Community Resilience as a Metaphor, Theory, Set of capacities and Strategy for Disaster Readiness. *American Journal of Community Psychology*. <https://doi.org/10.1007/s10464-007-9156-6>.
- Oh, N., Okada A. & Comfort, LK. (2014). "Building Collaborative Emergency Management Systems in Northeast Asia: A Comparative Analysis of the Roles of International Agencies". *Journal of Comparative Policy Analysis* 16, No. 1, 94-111.
- Okada, N & Matsuda, Y. (2005). "Risk Communication Strategy for Disaster Preparedness viewed as Multi-lateral Knowledge Development". *IEEE International Conference on Systems, Man and Cybernetics*, Waikoloa, pp. 640-647 Vol. 1. <https://doi.org/10.1109/ICSMC.2005.1571219>.
- O'Neill, P. (2004). Developing a Risk Communication Model to encourage community safety from natural hazards. <https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=9ba065b8e2cf8b70c7a5ae59ba207565a010cbe0>

- O'Sullivan, J.J., Bradford, R.A., Bonaiuto, M., De Dominicis, S., Rotko, P., Aaltonen, J., Waylen, K.A., & Langan S. (2012). Enhancing Flood Resilience through improved risk communications. *National Hazards and Earth Systems Sciences* 12, pp 271-282: Copernicus Publications. <https://doi.org/10.5194/nhess-12-2271-2012>, 2012
- Pidgeon N, Kasperson R.E. & Slovic P. (2010). Introduction: The Social Amplification of Risk. 1-10. <https://doi.org/10.1017/CBO9780511550461.001>.
- Reid, H. (2015). Ecosystem- and Community-Based Adaptation: Learning from community-Based Natural Resource Management, Climate and Development. <https://doi.org/10.1080/17565529.2015.1034233>.
- Renn, O, et al. (1992). The Social Amplification of Risk: Theoretical Foundations and empirical applications. *Journal of Social Sciences* Vol. 48(4) <https://spssi.onlinelibrary.wiley.com/doi/10.1111/j.1540-4560.1992.tb01949.x>
- Renn, O. (1991). Risk communication and the social amplification of risk. In: Kasperson R.E., Stallen P.J.M. (eds) *Communicating Risks to the Public. Technology, Risk, and Society (An International Series in Risk Analysis)*, vol 4. Springer. https://link.springer.com/doi.org/10.1007/978-94-009-1952-5_14
- Renn, O. (2011). The social amplification/attenuation of risk framework: applied to climate change. *Climate Change* Vol. 2 (2). <https://doi.org/10.1002/wcc.99>
- Revita, J. (2018). Flooding in Davao. Sunstar Davao. Retrieved May 11, 2019 from <https://www.sunstar.com.ph/article/1745528/Davao/Local-News/Davao-City-flooded>
- Reynolds, B. & Seeger, M. (2005). Crisis and emergency risk communication as an integrative model. *J Health Communication* 2005 Jan-Feb; 10(1):43-55.
- Rufat, S., Tate, E., Burton, C.G., & Maroof, A.S. (2015). Social Vulnerability to Floods: Review of Case Studies and Implications for Measurement. *International Journal of Disaster Risk Reduction*. 14. 470 - 486. [10.1016/j.ijdr.2015.09.013](https://doi.org/10.1016/j.ijdr.2015.09.013). https://www.researchgate.net/publication/282910128_Social_Vulnerability_to_Floods_Review_of_Case_Studies_and_Implications_for_Measurement
- Sammadar, S., Yokomatsu, M., Dayour, F., Oteng-Ababio, M., Dziveno, T., Adams, M., & Ishikawa, H. (2015). "Evaluating Effective Public Participation in Disaster Management and Climate Change Adaptation: Insights from Northern Ghana through a User-based approach." *Risks, Hazards & Crisis in Public Policy*, Vol 6(1). <https://doi.org/10.1002/rhc3.12075>
- Skinner, C. & Rampersad, R. (2014). "A revision of communication strategies for effective disaster risk reduction: A case study of the

- South Durban basin, KwaZulu-Natal, South Africa", *Jambá: Journal of Disaster Risk Studies* 6(1), Art. #132, 10 pages.
<http://dx.doi.org/10.4102/jamba.v6i1.132>
- Terpstra, T., Lindell MK & Gutteling, JM. (2009). "Does communication (flood) risk affect (flood) risk perceptions? Results of a quasi-experimental study." *Risk Analysis: An International Journal* 29, No. 8:1141-1155.
- Thieken, A. H., Kienzler, S., Kreibich, H., Kuhlicke, C., Kunz, M., Muhr, B., Muller, M., Otto, A., Petrow, T., Pisi, S., & Schroter, K.. (2016). Review of the flood risk management system in Germany after the major flood in 2013. *Ecology and Society* 21(2):51.
<http://dx.doi.org/10.5751/ES-08547-210251>
- Tselios, V & Tompkins, E. (2017). "Local government, political decentralization and resilience to natural hazard associated disasters. *Environmental Hazards*: Vol 16 (3), 228- 252. <https://doi.org/10.1080/17477891.2016.1277967>
- United Nations Report. (2015). unstats.un.org/unsd/mi/pdf/MDG%20Book.pdf
- Weinstein, ND. (1989). Effects of personal experience on self-protective behavior. *Psychological Bulletin*, Vol 105(1), pp. 31-50.
<https://psycnet.apa.org/doi/10.1037/0033-2909.105.1.31>

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Meme Meals: Exploring the Potentials and Pitfalls of Memes in Promoting Healthy Eating among Filipino Gen Z

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ABSTRACT

Amid the growing ubiquity of memes in digital culture, several studies have explored their role in health promotion; however, limited research has specifically examined their potential to influence health information-seeking behaviors among Filipino Generation Z. This study investigates the perceived potential and limitations of internet memes in promoting healthy eating habits among this demographic. Anchored in Memetic Theory, which conceptualizes memes as cultural units that evolve and spread through imitation, and the Health Belief Model, which explores the cognitive processes influencing individuals' health-related decisions, the research employs a mixed-methods approach that combines quantitative survey data with qualitative analysis. Findings indicate that memes are widely perceived as effective in enhancing engagement with nutritional messages. The highest level of agreement was recorded for the statement, *"Memes make the topic of healthy eating habits more engaging, that is why I appreciate them,"* highlighting memes' appeal and relevance to Gen Z. While several limitations were proposed—such as the risk of trivializing serious messages or the possible lack of credibility—only one concern was affirmed: the need for regular content updates to maintain relevance and accuracy. Neutral responses to other limitations suggest that Gen Z may not view humor and informality as inherently detrimental to message credibility, reflecting their nuanced digital literacy and familiarity with online content. The study concludes that memes can serve as supplementary tools in digital health communication, particularly when strategically aligned with evidence-based content and health behavior frameworks. The integration

of Memetic Theory and the Health Belief Model offers a comprehensive understanding of how humorous and shareable content can function not only as a cue to action but also as a mechanism for increasing perceived relevance and accessibility of health information. These insights contribute to more adaptive and youth-centered approaches in public health messaging, particularly in addressing dietary behaviors among digital-native populations.

Keywords: *Internet memes, Health communication, Filipino Gen Z, Healthy eating habits, Digital media, Social media engagement*

INTRODUCTION

Memes are images, photographs, or videos shared on digital platforms juxtaposed with text that uses the emotion, meaning, or joke behind the original meme to communicate the author's message (Brown, 2020). Memes are often user-generated content created to provide humor and entertainment. They are particularly popular among younger generations, with 48% of Millennials (as of June 2025, ages 29 - 44) and over 50% of Generation Z (Gen Z) (as of June 2025, ages 13 - 28) reporting they send memes regularly to their social circle (Ypulse, 2019). Having combined text and images to create complex messages infused with cultural and social symbols, memes resonate with audiences by reflecting shared experiences and cultural references (Akhther, 2021). These elements make memes relatable and engaging as they leverage popular cultural references to connect with audiences on a deeper level (Aslan, 2021). During the COVID-19 pandemic, digital media platforms were agog with memes (Fafowora & Salaudeen, 2022). They have evolved into a distinct form of language and a more frequent means of nonverbal communication, particularly among Gen Z (Lamba & Jain, 2025).

However, despite their potential appeal to Filipinos who value humor, limitations exist. Young audiences, as noted by Ngo (2021), tend to exhibit negative attitudes toward the commercial use of memes, which may also influence their perception of meme-based health communication. This shift in attitudes was particularly evident during the COVID-19 pandemic (Botelho, 2023), raising questions about the effectiveness of memes as a medium for promoting health-related behavior. These mixed findings allow

for an exploration of the potential and limitations of memes in promoting health-related behaviors among young individuals.

Furthermore, the use of memes in health communication is a strategy to keep people informed about their health and influence their behavior so they can live healthier lives (Health communication: Effective strategies, 2023). Approximately, 74% of Filipino children aged 13-15 consume fewer than three servings of vegetables daily, while over 38% consume at least one soft drink each day (Philippine food environment is failing children, 2023). There is a need to promote healthy eating habits among Filipino youth who consume fruits and vegetables less and whose intake of sugary and salty products is high.

Strong pieces of evidence have been generated by research studies in major areas of health communication, such as e-health communication, that strategic health communication may improve the quality of life (Kreps & Neuhauser, 2015). Moreover, several studies have examined the relationship between the use of memes and health promotion (Kostygina et al., 2020; Msugther & Iman, 2020; Wasike, 2022; Myrick et al., 2022; Occa, Chen, & Teffeteller, 2025; Headley, Jones, Kanekar, & Vogelzang, 2022; Wang, Balapal, Ankem, Shyamsundar, Balaji, Kannikal, & Chong, 2023; Hong & Low, 2024; Griffith et al., 2025; Weckend & Chandra, 2024; Moya-Salazar et al., 2021; Wagner & Temmann, 2025). However, the use of social media for health communication requires adapting and reshaping content, such as memes, to various audiences and incorporating multimedia formats for convenience. There is a need then to investigate how memes may influence health information-seeking behaviors among a specific demographic.

This research that zeroes in on the Filipino Gen Zs aims to better understand how memes can be used for the promotion of healthy eating habits among this demographic by looking into their perceived potential and limitations. Specifically, it will answer the following question: *To what extent do the perceived potentials and limitations of memes promote healthy eating habits among Filipino Generation Z?*

It is important to consider the potential of humor as an information-spreading tool within the collaborative medium of social media (Burkley, 2022). Since memes are endemic on social media (Kostygina et al., 2020), they can be strategically used for the promotion of healthy eating habits, which is an important issue among the Filipino Gen Zs.

LITERATURE REVIEW

Hair et al. (2017) and Lelutiu-Weinberger et al. (2015) highlight the growing importance of social media in health promotion, emphasizing how memes, as cultural elements in social media messages, present a promising strategy to enhance outreach and interaction in health interventions (Kostygina et al., 2020). Internet memes have emerged as powerful tools for promotion, capable of addressing a wide array of social, cultural, and public concerns such as health. The fact that memes are endemic to social media makes them promising as a strategy to improve health campaign interest and engagement (Kostygina et al., 2020).

In the realm of public health, health institutions use memes to promote hygiene measures, disseminate correct information, and encourage disease prevention, showcasing the versatility of memes in health promotion activities. Moya-Salazar et al. (2021) note that memes served as personal communication channels during the COVID-19 pandemic. The study of Fafowora and Salaudeen (2022) finds that memes have the potential to create awareness, highlight the negative impacts of, say for example, COVID-19, and convey criticism about how the government handles the pandemic. Memes were also used to attack, share sensitive information, and derail a topic during the pandemic, according to Msughter and Iman (2020).

The relatable and humorous nature of memes makes them particularly effective in promoting behaviors and engaging audiences. As Malodia et al. (2022) explain, humorous content in memes enhances message recall and fosters a deeper connection with the audience. While their research focuses on brand engagement, the findings also emphasize how memes can be used to promote awareness and reinforce ideas, such as advocating for healthy eating habits or supporting social causes.

The effectiveness of memes relies heavily on humorous punchlines to capture attention and achieve their intended result, provided they are understood within the shared context of the audience (Lee et al., 2019). Humor entertains and fosters emotional connections, making the audience more receptive to the message (Dolan et al., 2019). It fosters positive attitude and greater social media engagement, as their reliability encourages sharing, amplifying the message's spread and impact (Yang, 2022).

Memes can pull a prank (Msughter & Iman, 2020), but Chou, Iles, Gaysynsky, and Klein (2025) warn that memes whose humor is disparaging may create polarization instead of establishing a common ground among people about contentious health topics. Consequently, it may not foster

greater trust in science and evidence-based health information.

Zannettou et al. (2018) and Kiela et al. (2020) share the idea that although memes are often shared for entertainment purposes, they can also be created and distributed with malicious intent, targeting individuals based on attributes such as ethnicity, race, sex, gender identity, disability, disease, nationality, and immigration status. While some scholars, such as Yoon (2016), emphasize the importance of examining the potential seriousness of internet memes, it has also been noted that some memes may contain offensive content. Therefore, it is important to recognize that not all memes are positive (Rathi & Jain, 2023).

Memes also tend to quickly lose relevance or become outdated, demanding careful selection and utilization by brands. Without a thorough understanding of meme culture, brands may inadvertently offend or alienate consumers, leading to negative publicity (Arie Bowo, Anisah, & Marthalia, 2024).

While existing literature highlights the effectiveness of memes in enhancing audience engagement, raising awareness, and facilitating emotional connection in health communication, most studies have primarily focused on their role during public health crises, such as the COVID-19 pandemic, or in broader health campaigns involving hygiene, disease prevention, and mental health. Scholars have extensively examined the entertainment value, virality, and even the potential risks of humor-based or offensive content in meme communication. However, despite these developments, there remains a notable gap in research specifically addressing how memes influence health behavior change, particularly in the context of promoting healthy eating habits. Moreover, few studies explore how Filipino Generation Z—digital natives who consume and interact with memes daily—perceive both the potential and limitations of memes in shaping their dietary choices. This underexplored intersection of meme culture and nutritional health communication presents an opportunity for inquiry. Therefore, this study seeks to contribute to the field by examining the extent to which internet memes are perceived by Filipino Gen Z as effective tools in promoting healthy eating habits, while also identifying the limitations that may hinder their impact.

THEORETICAL FRAMEWORK

Memetic Theory

This research study is anchored on the Memetic Theory. The term meme was first introduced by Richard Dawkins in his 1976 book *The Selfish Gene*. Dawkins defines meme as a unit of cultural transmission - an idea, behavior, or style that spreads from person to person within a culture.

Just as genes replicate biologically, memes replicate culturally, evolving as they are shared, altered, and spread. In the context of the internet and social media, memes have evolved into short, humorous, often image-based messages that convey ideas quickly and memorably. Memes typically exhibit four key characteristics that contribute to their effectiveness as communication tools: reproducibility, as they are easy to copy, modify, and re-share; relatability, as they align with shared experiences or emotions; simplicity, as they convey messages using minimal words or visuals; and virality, as they spread rapidly through social networks, particularly among members of Generation Z.

Given the goal of the research study, which is to understand how memes can be used effectively, and what limits their influence in promoting healthy eating habits among Filipino Gen Z are, the Memetic Theory helps to explain the anatomy of virality. This helps in identifying: what memes about food and health are being widely shared, which ones spark engagement, positive reactions, or behavioral reflections, and what memetic elements (humor, visuals, trends, language) make health messages more effective. It also helps identify why memes might fail. Memes are often humorous and casual - which can be both a strength and a weakness; important health messages might be oversimplified or misunderstood; memes can also trivialize serious health issues; a meme's message might get distorted as it is reshared and remixed.

Filipino Gen Zs are highly active online, and meme-sharing is part of their digital language. The Memetic Theory can help analyze how local humor, language, and trends affect meme effectiveness. It can also help explore how Filipino Gen Zs use memes for peer validation, identity formation, and everyday conversations, especially about food and lifestyle.

Health Belief Model

The Health Belief Model (HBM) is a psychological framework developed in the 1950s by social psychologists Hochbaum, Rosenstock, and

Kegels, working within the U.S. Public Health Service. It remains one of the most widely utilized models for understanding health behavior and guiding health communication strategies. The model was originally formulated to explain why individuals fail to participate in disease prevention and health promotion programs, even when such interventions are freely available. Since then, it has been adapted and extended across various public health domains, including nutrition, vaccination, exercise, and chronic disease management.

At its core, the Health Belief Model posits that individual behavior regarding health is influenced by a set of key beliefs and perceptions. These include perceived susceptibility (an individual's belief about the likelihood of contracting a health condition), perceived severity (the belief about the seriousness of a condition and its consequences), perceived benefits (the perceived effectiveness of taking a recommended health action), and perceived barriers (the perceived obstacles to taking such action). The model also incorporates cues to action—external or internal triggers that motivate behavior change—and self-efficacy, or the confidence in one's ability to successfully perform the desired health behavior.

In the context of promoting healthy eating habits among Generation Z, the Health Belief Model provides a valuable lens through which to assess the psychological and cognitive dimensions that drive or hinder dietary behavior. It allows researchers to explore not only the awareness of health risks associated with poor nutrition but also the motivations and deterrents influencing an individual's choice to adopt healthier habits.

The intersection of the Health Belief Model and Memetic Theory offers a compelling framework for examining how health messages—particularly those disseminated through memes—can influence the behavior of Gen Z. Memetic Theory, which views memes as units of cultural transmission capable of evolving and spreading rapidly across digital networks, accounts for the popularity, shareability, and resonance of health-related content in online environments. While Memetic Theory explains the mechanisms of message dissemination and virality, the Health Belief Model provides insight into the internal cognitive processes that determine whether individuals accept and act upon these messages.

When integrated, these theories allow for a nuanced understanding of health communication. Memes that align with the constructs of the Health Belief Model—by highlighting susceptibility, conveying severity, emphasizing benefits, addressing barriers, and offering clear calls to

action—have the potential to function as persuasive health messages. They may serve as effective cues to action, prompting reflection and motivating behavior change. However, the limitations of memes, such as their brevity, reliance on humor, or potential for misinterpretation, underscore the importance of balancing virality with message clarity and psychological relevance. By combining the Memetic Theory's focus on content spread with the Health Belief Model's emphasis on individual perception and behavior, researchers can better evaluate the effectiveness and limitations of memes in health promotion efforts aimed at Gen Z.

METHODOLOGY

This study utilized a mixed-methods research design, which integrates both quantitative and qualitative approaches to provide a comprehensive understanding of complex phenomena (Creswell & Plano Clark, 2018), to investigate the perceived potential and limitations of internet memes in promoting healthy eating habits among Generation Z. The quantitative component of the study utilized a survey administered to 170 Filipino Generation Z individuals, aged 11 to 27, with 10 respondents representing each age group. A survey is a structured method of data collection commonly used to gather self-reported information on attitudes, perceptions, and behaviors from a large population (Fink, 2017). The survey was designed to assess participants' perceptions regarding the potential and limitations of internet memes in promoting healthy eating habits. To complement and contextualize the quantitative data, qualitative insights were obtained through focus group discussions (FGDs) involving 20 survey respondents. The researchers assigned a pseudonym to each participant. An FGD is a qualitative data collection technique that facilitates in-depth exploration of shared experiences, attitudes, and interpretations within a group setting (Krueger & Casey, 2015). The FGDs offered a deeper understanding of how Filipino Gen Z interprets and engages with health messages embedded in memes. Data saturation was observed with the 20 informants, as recurring themes and insights emerged consistently across the discussions.

The study was conducted entirely online, allowing researchers to reach a digitally fluent population that is naturally exposed to meme culture across various platforms. The researchers ensured ethical compliance by seeking informed consent from all respondents. This was achieved through a formal consent form that outlined the study's purpose, procedures, and the rights of participants. A purposive sampling technique was employed to deliberately select participants who had prior exposure to health-related memes and to ensure diversity across age groups and backgrounds, as

this method allows researchers to identify and include individuals who possess specific characteristics relevant to the research objectives (Palinkas et al., 2015). The researcher-made survey instrument has a content validity index of 0.96. It was divided into three parts: demographic profile, the potential of memes in health promotion, and the limitations of memes in influencing behavior, with respondents rating their agreement on a five-point Likert scale. Meanwhile, FGDs used semi-structured interview guides to facilitate open-ended discussions, encouraging participants to share how the memes influenced their perspectives and habits. Data were analyzed using descriptive statistics – frequencies, percentages, means, and standard deviations for the quantitative part, while thematic analysis was applied to qualitative responses to identify patterns and insights.

RESULTS AND DISCUSSION

Table 1

The Perceived Extent of the Potential of Internet Memes to Promote Healthy Eating Habits Among Filipino Gen Z

Indicator	Mean	Standard Deviation	Descriptive Equivalent
1. Memes used in health campaigns that promote healthy eating habits are more likely to catch my attention and engage me compared to traditional approaches like flyers and brochures.	4.38	0.737	Agree
2. Memes are effective in raising awareness about healthy eating issues and in promoting positive health-related behaviors.	4.31	0.738	Agree
3. Memes about healthy eating habits seen by individuals increase the likelihood of individuals to choose healthier lifestyle choices, such as healthier food options, nutrition, and exercise.	4.36	0.743	Agree

4. Memes combine information with entertainment that is why they are effective at enhancing individuals' perceptions of healthy eating	4.36	0.758	Agree
5. Memes make the topic on healthy eating habits more engaging that is why I appreciate them.	4.41	0.717	Agree
6. Memes about healthy eating resonate with me and encourage me to think more positively about nutrition.	4.25	0.775	Agree
7. Memes can increase engagement of individuals with health campaigns on social media.	4.32	0.709	Agree
8. Memes used to promote healthy eating habits are memorable and leave a lasting impression.	4.32	0.751	Agree
9. Memes have evolved into a quick and effective tool for disseminating ideas and emotions.	4.35	0.717	Agree
10. The use of memes is a promising strategy to promote healthy eating habits among Filipino GenZ.	4.27	0.820	Agree
Overall	4.33	0.747	Agree

Descriptive Equivalent: Mean values are interpreted as follows:

1.00–1.50 = Strongly Disagree	(No Potential At All)
1.51–2.50 = Disagree	(Low Potential)
2.51–3.50 = Neutral	(Uncertain Potential)
3.51–4.50 = Agree	(High Potential)
4.51–5.00 = Strongly Agree	(Very High Potential)

With an overall mean of 4.33, Table 1 indicates that internet memes are perceived to have high potential to be used as tools to promote healthy eating habits among Filipino Gen Z. The highest mean score (4.41) corresponds to the statement, *“Memes make the topic on healthy eating habits more engaging that is why I appreciate them.”* Conversely, the lowest mean score (4.25) corresponds to the statement, *“Memes about healthy eating resonate with me and encourage me to think more positively about nutrition.”*

RESULTS AND DISCUSSION

Table 1

The Perceived Extent of Limitation of Internet Memes to Promote Healthy Eating Habits Among Filipino Gen Z

Indicator	Mean	Standard Deviation	Descriptive Equivalent
1. Constant monitoring and updating of memes is required when using memes to promote healthy eating habits.	3.54	1.094	Agree
2. Memes used in promoting healthy eating habits quickly lose their relevance.	3.14	1.034	Neutral
3. Memes about healthy eating habits often lack reliable information.	3.12	1.033	Neutral
5. Memes simplify complex nutrition facts too much, which can cause people to misunderstand healthy eating.	3.18	1.092	Neutral
6. The entertainment focus of memes can undermine the seriousness of promoting healthy eating habits.	3.12	1.042	Neutral
6. The entertainment focus of memes can undermine the seriousness of promoting healthy eating habits.	3.12	1.042	Neutral

7. Memes promoting healthy eating habits are often shared primarily for entertainment rather than educational purposes.		0.709	Agree
8. Memes about healthy eating can sometimes be created and shared with malicious intent.	3.26	1.232	Neutral
9. Not all healthy eating habit memes are positive, and some may spread harmful or misleading information.	3.48	1.173	Neutral
10. Healthy eating memes may contain offensive content, which can undermine their positive impact.	3.19	1.202	Neutral
Overall	3.25	1.202	Neutral

Descriptive Equivalent: Mean values are interpreted as follows:

- 1.00–1.50 = Strongly Disagree (No Limitation At All)
- 1.51–2.50 = Disagree (Low Limitation)
- 2.51–3.50 = Neutral (Uncertain Limitation)
- 3.51–4.50 = Agree (High Limitation)
- 4.51–5.00 = Strongly Agree (Very High Limitation)

With an overall mean of 3.25, Table 2 reveals a perceived uncertain limitation of memes as used to promote healthy eating habits. The highest-rated statement, with a mean of 3.54, “Constant monitoring and updating of memes is required when using memes to promote healthy eating habits.” sets a high limitation in the use of memes to promote healthy eating habits among Filipino Generation Z. The lowest-rated statements with a mean of 3.12, on the other hand, are “The entertainment focus of memes can undermine the seriousness of promoting healthy eating habits.” and “Memes about healthy eating habits often lack reliable information.” are either seen as a limitation or not.

Themes about the Potential of Memes for the Promotion of Healthy Eating Habits Among Filipino Gen Z

Based on the focus group discussion with 20 Filipino Gen Z informants, several key themes emerged regarding the potential of memes in promoting healthy eating habits. These themes were: (1) Engagement and Attention-Grabbing, (2) Relatability and Humor, (3) Shareability and Virality, (4) Influence on Behavior and Mindset, and (5) Accessibility and Simplicity.

Engagement and Attention-Grabbing

Informants emphasized that memes naturally draw attention due to their humor and digestible format. As Pablo said, *“Makatuon ka dayon, maka-catch kag attention ate kay funny baya...”* (You learn immediately. It catches your attention, sister, because it’s funny.). These attributes make memes effective in capturing Gen Z’s interest, particularly in contrast to more traditional health communication methods.

The high mean score of 4.33 from the quantitative findings reinforces this perception, supporting the assertion of Hair et al. (2017) and Lelutiu-Weinberger et al. (2015) that social media plays a significant role in health promotion. Memes, as cultural elements, enhance outreach by engaging audiences in non-traditional yet impactful ways (Kostygina et al., 2020). Their humorous appeal boosts message recall and connection, as argued by Malodia et al. (2022), aligning well with Gen Z’s content preferences.

Relatability and Humor

Mememes are seen by the informants as highly relatable and reflective of Gen Z’s lived realities, making them ideal vehicles for delivering meaningful messages through humor. As Delia said, *“Mas makarelata kaayo mi... kay relatable sya para sa amoa nga generation.”* (We can relate. It’s relatable for our generation.). Daniel explained, *“Their humorous or catchy nature can simplify complex information, making healthy choices feel more accessible.”*

This mirrors the views of Dolan et al. (2019) and Yang (2022), who noted that humor not only entertains but also strengthens emotional bonds between content and audience, resulting in higher levels of social media engagement. Humor, therefore, becomes more than an entry point; it builds a sustained connection to the message.

Shareability and Virality

The informants frequently discussed how memes are embedded in their daily digital habits and how quickly they can be shared, enhancing their viral potential. Narcisso shared, *“Everytime nga mag-open ka sa Facebook, naa jud kay makita nga memes.”* (Every time you open Facebook, you always see memes). Furthermore, Mariela said, *“Easy to share, which helps find the message quickly, especially among young people.”*

This resonates with Moya-Salazar et al. (2021), who observed how memes were widely utilized by institutions during the COVID-19 pandemic to disseminate critical health information. Their versatility lies in their ability to blend education with entertainment, making them a potent medium for spreading health messages rapidly and organically.

Influence on Behavior and Mindset

Several participants recognized the persuasive power of memes to influence decisions and subtly nudge behavior toward healthier choices. Juanita said that *“It reminds me to eat healthier foods... and boost my mood.”* Diyesabel added that *“Maigo jud mi and maka realize na tama sad no na we should balance our diet.”* (It resonates with us and makes us realize that it’s true: we should balance our diet). *“It has something to do with influence... Gen Z kay more on awat-awat man gud ta...”* (It has something to do with influence because Gen Z tends to copy others.), Emmanuel explained.

This aligns with the idea that memes can function as behavioral prompts. Informants’ acknowledgment that Gen Z often mimics online content supports the idea that memes are persuasive tools, capable of shaping behavior and mindset. This further validates Moya-Salazar et al.’s (2021) insights into the power of meme culture during public health crises.

Accessibility and Simplicity

Informants appreciated how memes can be created and understood easily, with low resource requirements and high accessibility via social media platforms. Pedro said that *“Dali ra sya mabuhat... then maka-post dayon ka sa social media.”* (It’s easy to make, then you can post it right away on social media.). Francisco added that *“Accessible ra sya tanan as long as naka-connect ka sa internet.”* (It’s accessible to everyone as long as you’re connected to the internet.).

These features echo Malodia et al.’s (2022) view that simplicity in messaging, especially when combined with humor, facilitates better understanding and stronger connections with audiences. The use of memes democratizes content creation and advocacy, allowing even grassroots actors to participate in public health promotion.

In conclusion, the thematic analysis, supported by both informant insights and literature, affirms the role of memes as effective tools for promoting healthy eating habits among Filipino Gen Z. With a high mean score of 4.33 validating their positive reception, memes stand out for their ability to engage, relate, spread, influence, and simplify health messages. These findings align with Memetic Theory, which suggests that ideas—like memes—act as cultural units that replicate, evolve, and spread within a population much like genes, making them powerful carriers of behavior and beliefs in the digital age. When crafted with humor, relevance, and clarity, memes become memorable and easily shareable, facilitating the rapid transmission of health-promoting messages. Moreover, the effectiveness of memes in subtly influencing dietary behavior can also be explained through the Health Belief Model (HBM). This model posits that behavior change is influenced by perceived susceptibility, severity, benefits, and barriers. Memes, through relatable content and humor, can reduce perceived barriers to healthy eating by making it appear more achievable and socially acceptable, while also increasing perceived benefits and cues to action in a light, non-threatening way. Thus, memes do not merely entertain—they function as digital prompts that align with both memetic and health communication frameworks to encourage healthier lifestyle choices.

Table 3

Summary of Themes of the Potential of Memes for the Promotion of Healthy-Eating Habits Among Filipino Gen Zs

Theme	Brief Description
1. Engagement and Attention-Grabbing	Memes capture Gen Z’s attention with humor and visual appeal. Their digestible format makes them more engaging than traditional health messages.
2. Relatability and Humor	Humor makes memes feel personal and reflective of Gen Z’s experiences. This emotional connection enhances message retention and makes complex ideas simpler.

3. Shareability and Virality	Memes fit naturally into Gen Z's digital habits. Their ease of sharing enables fast, organic dissemination—ideal for reaching a wide audience quickly.
4. Influence on Behavior and Mindset	Memes can influence attitudes and encourage healthy behavior change. Informants noted that memes prompted reflection on their food choices.
5. Accessibility and Simplicity	Memes are low-cost, easy to create, and accessible via social media. Their simplicity allows even non-experts to participate in public health communication.

Themes about the Limitations of Memes for the Promotion of Healthy Eating Habits among Filipino Gen Z

Based on the focus group discussion with 20 Filipino Gen Z informants, several key themes emerged regarding the limitations of memes in promoting healthy eating habits. These themes are: (1) Ephemerality of Trends and Need for Constant Updating, (2) Difficulty in Establishing Clarity and Connection Between Meme and Message, (3) Risk of Misinterpretation or Misinformation, (4) Subjectivity of Humor and Relatability, and (5) Uncertainty Due to Lack of Familiarity with Meme-Based Campaigns.

Ephemerality of Trends and Need for Constant Updating

Memes are highly trend-dependent and quickly become outdated. To stay effective, they require constant monitoring and updating to match current internet culture and Gen Z interests. Mariela emphasized that *“Trends change fast. So, updating memes keeps them fresh and relatable.”* Juan added that, *“It needs an update for it to stay relevant and also engaging and para pod nga naay impact.”* (It needs to be updated to stay relevant and engaging, and also so it will have an impact.). Vico is worried, saying, *“Using outdated memes might make the message feel less relatable.”*

These responses highlight the short-lived nature of meme trends. If not regularly updated, memes can lose relevance and fail to engage the Gen Z audience. This implies a high maintenance cost for health campaigns relying on meme-based communication.

This study also underscores limitations identified in previous research. While Fafowora and Salaudeen (2022) highlight memes' ability to create awareness and spark public dialogue, Msughter and Iman (2020) caution that memes can derail discussions or spread sensitive content—a concern echoed by respondents who emphasized the need to constantly monitor and update meme content. The observation that meme relevance is fleeting aligns with the warning by Arie Bowo et al. (2024) that outdated or poorly understood memes can backfire, leading to alienation or miscommunication. The data from this study confirms these concerns, suggesting that meme-based health communication must be agile and culturally attuned to avoid becoming ineffective or counterproductive.

Difficulty in Establishing Clarity and Connection Between Meme and Message

Several participants found it difficult to link the meme to the intended health message. This disconnect weakens the educational or persuasive power of the meme. *"There were some statements that felt vague or lacked real-life context, which made it hard to decide," Vico said. "Dili nako makita btaw unsay connection sa memes ug sa product."* (I really can't see the connection between the meme and the product.), Pedro added. Narcisso explained, *"Naay uban memes nga imbis na simplify siya, imoha siyang gina lisod... murag lisod siya sabton."* (There are some memes that, instead of simplifying the message, actually make it more complicated. They're quite hard to understand.).

These quotes show a recurring issue: if the humor or structure of a meme overshadows the message, it leads to confusion or misinterpretation. Clarity and contextual relevance are key, especially for health-related topics. This reinforces Msughter and Iman's (2020) warning that memes can derail discussions or distort sensitive messages when the meme's form or humor overpowers its function as a health communication tool.

Risk of Misinterpretation or Misinformation

Because memes are informal and often rely on irony or exaggeration, they are susceptible to being misunderstood or misused. This can potentially spread misinformation rather than promote healthy habits. Narcisso said that, *"Basin maka spread siyag misinformation so ang mga tao baya ang Pinoy kay dali ra baya mag tuo-tuo."* (It might spread misinformation because, you know, Filipinos tend to believe things easily.). Furthermore, Emmanuel said, *"Memes are funny... pero usahay pud gina make sya sa content nga kanang very serious so ddto ga gaka unstable."* (Memes are funny, but

sometimes they're used for content that's serious, so that's where it becomes unstable.).

This theme suggests that memes, if not properly contextualized, can mislead rather than educate. Participants were cautious of humor's dual-edged nature—memes may engage, but they may also trivialize or distort complex health issues. Again, this reflects findings from previous studies (e.g., Msughter & Iman, 2020) warning of the risks involved when meme content is not adequately curated. If left unchecked or misunderstood, memes can amplify misinformation or alienate audiences, especially if they rely too heavily on sarcasm or obscure internet references.

Subjectivity of Humor and Relatability

What is humorous or engaging to one person may not resonate with another. This is especially true across demographic lines, making memes less universally effective. As Emmauel said, *"It is somehow... not relatable sakoa pero naa syay context... so mao lage to ganina maybe it's not effective to me or maybe effective to some."* (It's somehow not relatable for me, but it has context. So, like I said earlier, maybe it's not effective for me, but maybe it is for others.). Narcisso added, saying, *"Depende gyapon sa imo kung muigo sa imo ang meme bitaw."* (It still depends on you if the meme hits you or not.). Vico shared a personal note, saying, *"Lisod paka taw on... I can easily tell if the meme is effective kung like nakuha niya akoang giti."* (There are people who are hard to please, but I can easily tell if the meme is effective if it makes me smile).

These responses underscore the subjective nature of humor and meme effectiveness. A meme's success depends heavily on audience-specific relevance, which challenges its use for broad public health campaigns. The risk that Arie Bowo et al. (2024) identified—of memes alienating audiences when they're poorly understood—is evident here, especially when the humor doesn't land or the audience doesn't relate to the meme format.

Uncertainty Due to Lack of Familiarity with Meme-Based Campaigns

Some informants expressed confusion or indecision because meme-based health promotion is a novel idea for them. This reflects a gap in understanding how memes can be used strategically beyond entertainment. Narcisso expressed, saying, *"Galibog ko ate kay feel man gud nako naa syay limitations pero feel sad nako wala."* (I'm confused, sister, because I feel like it has limitations, but at the same time, I also feel like it doesn't have limitations.). Delia added, saying, *"Dili ko sure sa iyang limitations nga*

side... bag-o paman jud sya nga idea saakoa." (I'm not sure about its limitations because it's a new idea for me.). And Pedro said, *"Neutral ko since... makakita ko'g memes, naa man gyud uban pud memes nga dle sya connected."* (I'm neutral because when I see memes, there are some that aren't connected at all).

These statements reflect a conceptual barrier: some Gen Z respondents, despite being digital natives, are unfamiliar with meme-based advocacy in health. This unfamiliarity may hinder message reception and campaign success. It suggests that even when the format is native to the platform, its purpose (beyond entertainment) is not always clear, especially if the meme doesn't strike a balance between humor, clarity, and health education.

This theme reveals an important insight: many Gen Z individuals haven't encountered memes as structured tools for health promotion, resulting in indecisiveness or neutral responses.

In conclusion, while memes offer a unique and engaging avenue for health communication among Gen Z, this study reveals several critical limitations that must be addressed for their effective use. From the perspective of Memetic Theory, memes function as cultural replicators—units of information that spread through imitation. However, this very characteristic makes them vulnerable to rapid obsolescence; their value and virality depend on current trends and cultural relevance. As such, health campaigns must continuously update meme content to ensure ongoing resonance, a task that requires significant creative and cultural agility. Moreover, when humor overtakes substance, the meme's educational function may be compromised—leading to confusion, misinterpretation, or the unintentional spread of misinformation. This issue also connects with the Health Belief Model (HBM), which emphasizes that health behavior is influenced by individuals' perceptions of severity, susceptibility, benefits, and barriers. If the health message in a meme is unclear or misunderstood, it may fail to influence these perceptions or provide effective cues to action. The subjectivity of humor and varying digital literacies across audiences further complicate the use of memes as a universal tool for health advocacy. Participants' unfamiliarity with meme-based health campaigns suggests a gap in both digital health literacy and in the perceived credibility of informal media. These limitations echo prior research that, while memes can trigger dialogue and awareness, their misuse can derail discourse or dilute message clarity. Therefore, while meme-based strategies hold potential, they must be carefully designed, frequently refreshed, and sensitively tailored to the audience to maximize impact and avoid unintended consequences.

Table 4

Summary of Themes of the Limitations of Memes for the Promotion of Healthy-Eating Habits Among Filipino Gen Zs

Theme	Brief Description
1. Trend Dependency	Memes must be constantly updated to stay effective and relevant.
2. Message Clarity Issues	Difficulty linking meme content clearly to health messages.
3. Risk of Misinformation	Memes may spread false or confusing health information.
4. Humor is Subjective	Relatability and humor vary, reducing universal appeal.
5. Unfamiliarity with Memes as Health Tools	Limited prior exposure to meme-based campaigns leads to confusion or neutrality.

CONCLUSIONS AND RECOMMENDATIONS

This study explored the potential and limitations of memes in promoting healthy eating habits among Filipino Gen Z. The findings highlighted the engagement power of memes, using humor and relatability to capture attention and influence behavior. However, challenges such as the ephemerality of meme trends, potential for misinterpretation, and varying humor perceptions were identified. Additionally, some participants lacked familiarity with meme-based health advocacy, impacting the overall effectiveness.

Memes, as informed by Memetic Theory, act as replicable cultural units that spread and evolve within populations, making them a powerful tool for health communication. However, their rapid obsolescence and potential for misunderstanding challenge their effectiveness in promoting healthy eating habits. The Health Belief Model (HBM) further underscores this, suggesting that health behaviors are influenced by individuals' perceptions of the severity, susceptibility, benefits, and barriers related to health actions. If memes are unclear or misinterpreted, they may fail to trigger the necessary cues to action or shift these perceptions.

To maximize the impact of meme-based health campaigns, content should be frequently updated to remain relevant and ensure clear communication. Policymakers should incorporate meme strategies into public health frameworks, ensuring that memes are grounded in accurate, evidence-based information. Promoting digital health literacy among Gen Z will help them critically engage with memes and reduce the risk of misinformation. Furthermore, additional research is needed to refine the intersection of Memetic Theory and the Health Belief Model, thereby enhancing the effectiveness of digital health advocacy.

REFERENCES

- Akhther, N. (2021). Internet memes as form of cultural Discourse: A rhetorical analysis on Facebook. <https://doi.org/10.31234/osf.io/sx6t7>
- Arie Bowo, F., Anisah, A., & Marthalia, L. (2024). Meme marketing: Generation Z consumer behavior on social media. *Jurnal Indonesia Sosial Sains*, 5(02), 188–201. <https://doi.org/10.59141/jiss.v5i02.995>
- Aslan, E. (2022). Days of our ‘quarantined’ lives: Multimodal humour in COVID-19 internet memes. *Internet pragmatics*, 5(2), 227–256. <https://doi.org/10.1075/ip.00075.asl>
- Botelho, L. V., Freitas, J. V., Camara, A. O. D., de Almeida, I. F., Gonçalves, T. S., Horta, P. M., Canella, D. S., & Cardoso, L. O. (2023). Digital marketing of online food delivery services in a social media platform before and during COVID-19 pandemic in Brazil. *Public Health Nutrition*, 26(1), 1–11. <https://doi.org/10.1017/S1368980022002191>
- Brown, J. D. (2020). What do you meme, professor? An experiment using “memes” in pharmacy education. *Pharmacy*, 8 (4), 202. <https://doi.org/10.3390/pharmacy8040202>
- Burkley, S. (2022) Social media, humor, and crisis health communication: Humor used to inform over social media during Covid-19. *Student Research Submissions*. 477. https://scholar.umw.edu/student_research/477
- Chou, W. Y. S., Iles, I. A., Gaysynsky, A., & Klein, W. M. (2025). Public health communication approaches for building common ground. *American Journal of Public Health*, (0), e1-e8. <https://doi.org/10.2105/AJPH.2024.308003>
- Creswell, J. W., & Plano Clark, V. L. (2018). *Designing and conducting mixed methods research* (3rd ed.). SAGE Publications.
- Dawkins, R. (1976). *The selfish gene*. Oxford University Press.
- Dolan, R., Conduit, J., Frethey-Bentham, C., Fahy, J., & Goodman, S. (2019). Social media engagement behavior: A framework for engaging customers through social media content. *European Journal of Marketing*, 53(10), 2213–2243. <https://doi.org/10.1108/EJM-03-2017-0182>
- Fafowora, B. L., & Salaudeen, M. A. (2022). Nigerians and Covid-19 humour: Discursivity and public engagement through pandemic internet memes. *Journal of African Media Studies*, 14(2), 273–293. https://doi.org/10.1386/jams_00078_1

- Fink, A. (2017). *How to conduct surveys: A step-by-step guide* (6th ed.). SAGE Publications.
- Hair, E., Pitzer, L., Bennett, M., Halenar, M., Rath, J., Cantrell, J., ... Val-lone, D. (2017). Harnessing youth and young adult culture: Improving the reach and engagement of the truth® campaign. *Journal of Health Communication*, 22(7), 568–575. <https://doi.org/10.1080/10810730.2017.1325420>
- Headley, S. A., Jones, T., Kanekar, A., & Vogelzang, J. (2022). Using memes to increase health literacy in vulnerable populations. *American Journal of Health Education*, 53(1), 11-15. <https://doi.org/10.1080/19325037.2021.2001777>
- Health communication: Effective strategies | Tulane University. (2023, January 3). *School of Public Health*. <https://publichealth.tulane.edu/blog/health-communication-effective-strategies/>
- Hong, S. J., & Low, B. Y. F. (2024). Use of internet memes in PSAs: Roles of perceived emotion, involvement with memes, and attitudes toward the issuing organization in perceived PSA effectiveness. *Health Communication*, 39(6), 1185-1197. <https://doi.org/10.1080/10410236.2023.2207283>
- Kiela, D., Firooz, H., Mohan, A., Goswami, V., Singh, A., Ringshia, P., & Testuggine, D. (2020). The hateful memes challenge: Detecting hate speech in multimodal memes. *Advances in neural information processing systems*, 33, 2611-2624. <https://doi.org/10.48550/arXiv.2005.04790>
- Kostygina, G., Tran, H., Binns, S., Szczypka, G., Emery, S., Vallone, D., & Hair, E. (2020). Boosting health campaign reach and engagement through use of social media influencers and memes. *Social Media + Society*, 6(2). <https://10.1177/2056305120912475>
- Kreps G.L., Neuhauser L. (2015). Designing health information programs to promote the health and well-being of vulnerable populations: The benefits of evidence-based strategic health communication. *Meeting Health Information Needs Outside Of Healthcare*, 3–17. <https://doi.org/10.1016/B978-0-08-100248-3.00001-9>
- Krueger, R. A., & Casey, M. A. (2015). *Focus groups: A practical guide for applied research* (5th ed.). SAGE Publications.

- Lamba, P. S., & Jain, N. (2025). Psycho-physiological impact of virtual non-verbal communication on Gen Z workforce: A study of memes. *Acta Psychological*, 254, 104848. <https://doi.org/10.1016/j.actpsy.2025.104848>
- Lee, H. H., Liang, C. H., Liao, S. Y., & Chen, H. S. (2019). Analyzing the intention of consumer purchasing behaviors in relation to internet memes using VAB model. *Sustainability (Switzerland)*, 11(20). <https://doi.org/10.3390/su11205549>
- Lelutiu-Weinberger, C., Pachankis, J. E., Gamarel, K. E., Surace, A., Golub, S. A., & Parsons, J. T. (2015). Feasibility, acceptability, and preliminary efficacy of a live-chat social media intervention to reduce HIV risk among young men who have sex with men. *AIDS and Behavior*, 19, 1214-1227. <https://doi.org/10.1007/s10461-014-0911-z>
- Malodia, S., Dhir, A., Bilgihan, A., Sinha, P., & Tikoo, T. (2022). Meme marketing: How can marketers drive better engagement using viral memes? *Psychology & Marketing*, 39(9), 1775–1801. <https://doi.org/10.1002/mar.21702>
- Moya-Salazar, J., Cañari, B., Gomez-Saenz, L., & Contreras-Pulache, H. (2021). Other ways of communicating the pandemic—memes and stickers against COVID-19: A systematic review. *F1000Research*, 10. <https://doi.org/10.12688/f1000research.51541.1>
- Msughter, A. E., & Iman, M. L. (2020). Internet meme as a campaign tool to the fight against COVID-19 in Nigeria. *Global Journal of Human-Social Science: A Arts & Humanities—Psychology*, 20(6), 27–39.
- Myrick, J. G., Nabi, R. L., & Eng, N. J. (2022). Consuming memes during the COVID pandemic: Effects of memes and meme type on COVID-related stress and coping efficacy. *Psychology of Popular Media*, 11(3), 316. <https://doi.org/10.1037/ppm0000371>
- Ngo, T. M. (2021). Meme marketing: How viral marketing adapts to the internet culture. *Honors Program Theses*, 484. <https://scholarworks.uni.edu/hpt/484>
- Occa, A., Chen, H. Y., & Teffeteller, K. L. (2025). Using online memes to communicate about health: A systematic review. *American Journal of Health Promotion*, 39(2), 299-329. <https://doi.org/10.1177/089011712412720>
- Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2015). Purposeful sampling for qualitative data collec-

- tion and analysis in mixed method implementation research. *Administration and Policy in Mental Health and Mental Health Services Research*, 42(5), 533–544. <https://doi.org/10.1007/s10488-013-0528-y>
- UNICEF. (2023, March 8). Philippine food environment is failing children. <https://www.unicef.org/philippines/press-releases/philippine-food-environment-failing-children>
- Rathi, N., & Jain, P. (2023). The Power and Pitfalls of Internet Memes in promoting brand awareness and engagement on social media. *World Scientific News*, 184, 51-62.
- Wagner, A., & Temmann, L. (2025). Memefying mental illness: A qualitative content analysis of mental illness portrayals in #depressionmemes on Instagram. *International Journal of Communication*, 19, 26. <https://hdl.handle.net/2066/319096>
- Wang, D., Balapal, N., Ankem, A., Shyamsundar, S., Balaji, A., Kannikal, J., ... & Chong, P. (2023). Primary perspectives in meme utilization as a digital driver for medical community engagement and education mobilization: pre-post study. *JMIR Human Factors*, 10, e40244. <https://doi.org/10.2196/40244>
- Wasike, B. (2022). Memes, memes, everywhere, nor any meme to trust: Examining the credibility and persuasiveness of Covid-19-related memes. *Journal of Computer-Mediated Communication*, 27(2), zmab024. <https://doi.org/10.1093/jcmc/zmab024>
- Weckend, E. F., & Chandra, P. (2024, July). Viral transmissions: Memes as strategies for destigmatizing taboos around sexual health on TikTok. *In Companion Publication of the 2024 ACM Designing Interactive Systems Conference* (pp. 271-274). <https://doi.org/10.1145/3656156.3663730>
- Yang, G. (2022). Using funny memes for social media marketing: The moderating role of bandwagon cues. *Journal of Promotion Management*, 28(7), 944–960. <https://doi.org/10.1080/10496491.2022.2054904>
- Yoon, I. (2016). Why is it not just a joke? Analysis of internet memes associated with racism and hidden ideology of colorblindness. *Journal of Cultural Research in Art Education*, 33, 93–123. <https://doi.org/10.2458/jcrae.4898> <http://www.jcrae.org/journal/index.php/jcrae/article/view/60>
- YPulse. (2019). 3 Stats that show what memes mean to Gen Z & Millennials. <https://www.ypulse.com/article/2019/03/05/3-stats-that-show-what-memes-mean-to-gen-z-millennials/>

Zannettou, S., Caulfield, T., Blackburn, J., De Cristofaro, E., Sirivianos, M., Stringhini, G., & Suarez-Tangil, G. (2018). On the origins of memes by means of fringe web communities. *In Proceedings of the internet measurement conference 2018* (pp. 188-202). <https://doi.org/10.48550/arXiv.1805.12512>

From the Grassroots Upward: Imagining a Grassroots Care Ethics Framework for Critical Crisis Communication and Management

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ABSTRACT

This essay presents a critique of traditional crisis management and its communication frameworks which exhibit managerial biases, functionalistic tendencies, and marginalizing effects in their prescribed strategies amidst crisis situations. These theoretical and practical orientations of the field result in the voices of the typically less powerful publics and stakeholders being sidelined and erased, most especially those of the grassroots. For instance, theoretical frameworks such as the image repair theory (Benoit, 1997), apology theory (Hearit, 2006), and situational crisis communication theory (Coombs, 2007) manifest similar corporatist biases—advocating crisis responses strategies that are organization-led, organization-oriented, and organization-benefitting—largely born out of the field’s roots in public relations and organizational communication. In response to this disciplinary lapse, this critical essay seeks to imagine and encourage the imagination of an ethical crisis management framework that highlights and incorporates care ethics (Gilligan, 1977) in crisis response strategies, and prevents grassroots erasure. This grassroots-oriented care ethics framework revolves around the affective and relational dimensions of a crisis situation, addressing the emotions and relationships that surface between the organization and the less powerful stakeholders. In responding to the crisis, the imagined framework proposes crisis resolutions that are formulated from below, implemented upward, and empowered downward. This critical essay then presents cases of crisis situations and resolutions that allude to the proposed ethical framework. The limitations of the *grassroots care ethics framework* related to the existing corporate interests, the efficacy of the grassroots community, and the affective and relational labor required by the framework are also discussed. Ultimately, the paper presents the potential and practical applications of the proposed framework in contexts of crisis.

Keywords: *crisis management, ethics of care, grassroots, critical crisis communication, crisis communication theory*

INTRODUCTION

Crisis communication, having emerged from public relations and organizational communication, exhibits orientations and values that reflect the corporate interests (Kim & Dutta, 2009; Latosa, 2020). Many of the foundational and contemporary frameworks for crisis communication such as the image repair theory (Benoit, 1997), apology theory (Hearit, 2006), and situational crisis communication theory (Coombs, 2007) among others are focused on reducing the impact of various crises on the organizational health and repairing the reputation of the said organization if and when damaged. The centrality of the organization-in-crisis in most crisis situations has influenced most frameworks to become organization-oriented, organization-led, and organization-benefitting (Cheney & Christensen, 2001). These conditions and traditions, unfortunately, have led to the erasure of the affected public's voices and those farthest away from the organization—the grassroots.

This essay argues that given the corporate focus of most crisis communication strategies, similar to what Kim and Dutta argue as well (2009), the discipline has developed to serve the interests of organizations much more than the affected and typically less powerful publics (Sellnow & Ulmer, 1995). This is further reflected by the lack of crisis management ethics frameworks that emphasize the dignity, humanity, and empowerment among the grassroots communities during and after a crisis largely due to financial and legal risks (Coombs, 2015). In addition, even if organizations attempt to alleviate the impact of crisis on their publics and help in the recovery of such communities—their subscription to traditionally corporate frameworks of crisis response would prevent them from acquiring intimate knowledge of the grassroots experience and crafting a realistic and grounded crisis management strategy for the publics (Roper, 2005; Vardeman-Winter et al., 2014). In other words, the dominance of top-down corporate crisis frameworks persistently prevents organizations from truly immersing with the grassroots, familiarizing with their experiences, and employing a strategy that emerges first from the grassroots then implements upward. Such top-down dominance also hinders the recognition of the affects, crucial relationships, and demand for genuine care among the grassroots and other compromised publics (Nakagawa & Shaw, 2004). Intentional care, among other things, is what makes a crisis response ethical (Gilligan, 1977; Simola, 2003), and exactly what the traditional crisis frameworks for and from the corporations lack in particular.

In response to this disciplinary lapse, this essay seeks to imagine

and encourage the imagination of a grassroots care ethics framework for critical crisis communication—an ethical care framework that is affectively and relationally oriented toward and upward from the grassroots. This framework begins the crisis resolution from the bottom, requires downward and lateral empowerment, and implements upward among the organizations. The grassroots care ethics approach seeks to decenter the organization by centering and concentrating the resources, power, and care at the grassroots level and applying strategies upward rather than downward.

CRITIQUE OF TRADITIONAL CRISIS MANAGEMENT

Limitations of the Dominant Crisis Communication Studies

Prior to establishing an alternative ethical framework for crisis communication, it must be established first how and why there is a need for one. The specific lapses of the traditional frameworks should be illustrated to highlight how the alternative approaches, such as the one imagined by this essay, would respond to each of them. According to Kim and Dutta's (2009) examination of the dominant crisis management frameworks, the current orientation of the discipline remains to exhibit a managerial bias, a functionalistic understanding of its purpose, and a tendency to neglect the significance and voices of the marginalized stakeholders.

First, in the prototypical sense, crisis communication is originally and traditionally a discipline dedicated to the protection of capitalistic profits (Fraustino & Kennedy, 2018; Karlberg, 1996). The original and traditional strategies for managing crisis and reducing reputational damage are all motivated by profit production, under the assumption that a healthy reputation positively correlates with larger income (Fraustino & Kennedy, 2018; Fearn-Banks, 2001). Due to these orientations, crisis communication strategies are typically bent not on genuinely serving the stakeholders and the publics, but on pacifying, appeasing, and managing them. Hence, the managerial bias or the tendency to treat publics as manageable segments of the market. The primary issue with such perspective, apart from its association with capitalism and entrepreneurship, is its likelihood to dehumanize the stakeholders and even more so, the grassroots. By reducing the publics to mere audience segments, experiences of struggles and survival in the face of crisis are also reduced to quick metrics and key performance indicators. This profiteering perspective also births the highly transactional give-and-take nature of the relationship between the organization and the publics which ultimately prevents the growth of more intimate affects

between the two (Liu, 2007).

Second, crisis communication under the dominant frameworks is treated as a linear process that involves functionalistic message production and reception (Kim & Dutta, 2009). This is arguably a more granular manifestation of the discipline's managerial bias wherein the primary role of crisis response is to function as a pacifier for the affected publics. In this perspective, crisis communication messages are reduced to devices and contents deployed by an organization only to appease the stakeholders — nothing else (Duffy, 2000; Coombs, 2001). The functionalistic orientation further reinforces the transactional relationship of organizations with the people. In addition to what Kim and Dutta (2009) argued, this orientation of the dominant frameworks also further reduces the humanity of the publics, especially the grassroots. By assuming that the publics' struggles and discontentment can be switched on and off by specific crises and crisis response strategies, the framework neglects the individual and collective autonomy and emotions of the people, and reduces their experiences as by-products of the organizational crisis and the resolutions thereof (Curtin & Gaither, 2005).

Lastly, the dominant crisis communication agenda illustrates the false myth that the marginalized sectors neither have voices nor impact (Fearn-Banks, 2001). The corporate sector fails to hear the voices from below not because these voices are not sufficiently salient, but because they refuse to listen as well as actively erases them. This results from the tendency of traditional crisis management to segment stakeholder sectors by order of importance relative to the organizational reputation, and to prioritize the most effectual or impactful ones when employing crisis responses (Fearn-Banks, 2001; Kim & Dutta, 2009). Similarly, the dominant crisis responses—due to their tendency to listen only to stakeholders who directly and significantly influence their reputation—also tend to neglect and erase the voices of the grassroots who may demonstrate little to no impact on the organizations' reputation. The managerial bias and functionalistic orientation of crisis management also ultimately contribute to the dehumanization of the publics and their reduction to mere reactive and pacifiable audiences.

Grassroots as Erased Stakeholders

In light of the traditions and lapses of the dominant crisis communication frameworks, this essay further explores the conditions of the grassroots community as erased stakeholders. Such exploration revolves

around three themes: crisis solutions for the grassroots coming from above, the downward implementation of the crisis response, and the absence of downward and lateral empowerment in grassroots crisis situations. This section seeks to illustrate the specific consequences of erasing and decentering the grassroots community, and spotlighting the powerful organizations in the process of resolving crises.

Crisis Resolutions for the Grassroots Coming from Above

Ironically, many crisis resolutions were designed solely by the very organizations that caused the crises and rarely engage the publics who were affected and inconvenienced by them (Kim & Dutta, 2009). A similar case can be argued in the context of the grassroots community. Crisis responses that are supposed to improve the conditions of the compromised grassroots are crafted by supposed experts who are not familiar with the experiences, the needs, and the grounded resolutions that the people from below aspire for.

As a result, the crisis responses are only effective to the extent that the organization needs it to be, but not to an extent that also satisfies the grassroots. The functionalistic orientation of crisis management also manifests here—crisis managers from above designing solutions for the ordinary people whose experience they do not recognize (Vardeman-Winter et al., 2014). The process of crisis resolution stops once the organizational image has already been repaired.

The Downward Implementation of Crisis Response

In connection with the previous argument, one of the consequences of grassroots erasure in crisis communication and management is that the publics, especially the grassroots, turn to become mere receivers of the public relations messages. The affected publics are expected to react and respond appropriately to the crisis response that was employed, as if they are without autonomy and self-determination, reflecting the linear process of crisis resolution provided by the dominant frameworks.

Not only does the solution come from above, the expectations and implementations only happen below without equal self-corrective efforts from the end of the organizations. Ultimately, this reflects the uneven power between the organizations and the grassroots stakeholders.

Absence of Downward Grassroots Empowerment

Lastly, due to the organizations' ignorance on the grassroots experience and their underestimation of a crisis resolution that comes from below — there are no resources, power, and care that are offered from above downward to the grassroots (Dutta-Bergman, 2004). As a result, the grassroots continue to be unempowered and disempowered in crafting and implementing crisis resolutions that genuinely meet their needs, and are consequently left to depend solely on the unsatisfactory resolutions that come from the organizations. The cycle of systemic disempowerment and disappointment perpetuates in this case. This does not only exhibit the grassroots erasure, the managerial bias, and the functionalistic orientation of the dominant crisis communication frameworks — this also further proves that such frameworks continue to decenter genuine care for the grassroots (Kim & Dutta, 2009).

IMAGINING A GRASSROOTS CARE ETHICS FRAMEWORK

Ethics of Care

To orient the alternative ethical framework imagined to guide a more grassroots-oriented crisis communication, this essay engages Gilligan's (1977) *ethics of care* approach. The care ethics perspective, also known as the *ethics of care framework*, is an ethical and moral evaluation theory that centers on the importance of empathy, compassion, and care in social interactions and social responses among others (Gilligan, 1977; Simola, 2003; Coombs & Holladay, 2022). This ethical theory forwards that individuals should prioritize communicating and enacting empathy and care in social relationships and interpersonal interactions above all else, while also seeking to resolve conflicts and differences. This moral orientation stems from the acknowledgement of the humanity-wide desire to care and be cared for (Noddings, 1984).

The perspective, often associated with feminist ethical theories, was a result of an empirical research examining how women and young girls communicated, made decisions, and resolved conflicts during and after a crisis (Simola, 2003). Based on the findings, women are more likely to respond to conflict and the parties involved in the said conflict with compassion and intentional care (Gilligan, 1977). Preceding this ethics of care study, another empirical research which focused on the conflict and crisis management style of men and young boys had shown that they are more likely to manage conflict and resolve crisis with impartiality, fairness, and cold logic (Kohlberg, 1973). The ethical framework that emerged from this preceding research later became known as the justice ethics perspective or the *ethics of justice* framework. These two studies by Gilligan (1977) and

Kohlberg (1973) attempted to highlight the managerial and ethical differences between the two sexes when managing conflict, as well as their differences across the dimensions of empathy, compassion, impartiality, and fairness. Later on, the care ethics perspective was adopted in crisis management studies as both a lens and a method for communicating during and resolving conflicts after a crisis (Simola, 2003). This adoption also resulted from the observation that many theoretical attempts at incorporating ethics into crisis communication frameworks have mostly favored masculine values such as justice and fairness, and would ultimately benefit from more traditionally feminine values such as affect and relationships (Fraustino & Kennedy, 2018). Apart from examining the crisis management styles of individuals, the ethics of care framework has also been utilized in analyzing organizational crisis responses and the perceptions of the affected publics (Bauman, 2010; Diers-Lawson & Pang, 2016).

The care ethics perspective generally has two dimensions in the context of crisis communication which are the affective and relational aspects of a crisis response. When faced with a crisis, the *affective dimension* implores the organization to respond with empathy, compassion, and care (Simola, 2003). The care in this context should also be intentional rather than incidental. In other words, the organization must enact care not because it merely seeks to save face, but because it genuinely does care for and about the affected stakeholders and publics. The affective dimension also entails centering the crisis response on the emotions of the affected parties while also attending to the economic and technical demands of the crisis resolution (Bauman, 2010).

On the other hand, the *relational dimension* of the care ethics perspective emphasizes the importance of maintaining relational ties with the stakeholders and the public — reflecting the interpersonal nature of crisis communication (Simola, 2003; Gilligan, 1977). This relationship, however, does not pertain to the transactional and fleeting ties that organizations typically initiate and maintain with the people. Relationships, in the context of care ethics, are caring and humanized lasting connections between the organization and the stakeholders (Simola, 2003). The relational dimension frames the interpersonal relationship between the organization and the public as a moral virtue, as source of learning for both ends, and a social obligation for organizations (Ilie, 2021; Johnson, 2018). This emphasis on relationships also reflects the concept of *other-centeredness* which similarly calls for honesty, truth, support, and ultimate good for the benefit of the “other” in the relationship (Ilie, 2021).

The relational dimension also highlights the weight of not only

maintaining but also strengthening the organization-public relationship which is also considered more important than organizational interests. Similar to individual relationships, organizational relationships with the people are also maintained and strengthened through constant two-way symmetrical communication and transparent dialogue that showcase transparency, truthfulness, promptness, compassion, and care (Kim, 2015; Carroll, 2009).

Without particular focus placed on the affected grassroots community, several studies have attempted to examine various crisis situations using the perspective of care ethics. In his comparative analysis guided by the ethics of care, Contreras-Pacheco (2018) contrasted the crisis communications and management strategies employed by two oil and gas companies in South America after a series of tragic crisis situations that resulted in multiple deaths and damages. Preceding his examination of crisis communications in the face of an oil refinery explosion in Venezuela which led to 47 deaths and 135 injuries, and a mining dam collapse in Brazil which resulted in 19 deaths and the destruction of numerous homes and water resources, Contreras-Pacheco (2018) argued that care ethics in such situations would demand proactiveness, transparency, care, and sympathy from the end of the offending companies. The researcher later on highlighted the importance of claiming full responsibility, issuance of an apology for the pain caused, and deploying mechanisms to both financially and psychologically empower the affected publics which the two companies had partially fulfilled.

Another crisis communication study centering care amidst crisis has enumerated *various care landscapes* on which the ethics of care should be observed and enacted. These landscapes include the physical (i.e., material and embodied realities of the public), cultural (i.e., identities and social norms of the public), political (i.e., economies and politics among the public), and human landscapes (i.e., emotions and relationships) (Fraustino & Kennedy, 2018). In analyzing crisis communications in the middle of Nestle's infant formula promotion crisis in the 1970s through 1980s, and Uber's consumer outrage crisis in 2017, Fraustino and Kennedy (2018) looked into several instances and landscapes of organization-public relationships, vulnerabilities, and reciprocities. The researchers later on concluded that both organizations failed to comply with their framework's care principles across the four landscapes. Despite the lack of particular focus on the affected grassroots community, the studies by Contreras-Pacheco (2018) and Fraustino and Kennedy (2018) were able to emphasize the importance of positive affects and relationships sustained through care, compassion,

empowerment, and dialogic communication amidst various forms of crisis.

Crisis Communication for and by the Grassroots

This essay, ultimately, seeks to respond to the disciplinary and practical lapses that were birthed by the dominant crisis communication frameworks. Guided by the principles of the care ethics perspective and the conclusions of the previously cited studies that centered on care amidst crisis, the essay imagines and proposes the *Grassroots Care Ethics Framework* which seeks to achieve three objectives. These include the (1) construction of a caring crisis resolution for and by the grassroots; (2) pursuit of an upward implementation among caring organizations; and (3) realization of downward empowerment and care.

A Caring crisis Resolution for and by the Grassroots

In light of the assertion that the dominant crisis frameworks resulted in crisis response strategies that were exclusively designed by and delivered from above (i.e., the offending organization) — the proposed framework imagines the construction of caring crisis response strategies that are designed by the grassroots and for the grassroots themselves. Given the intimate and grounded knowledge that the public has regarding their own physical, cultural, political, and human landscapes (Kennedy & Fraustino, 2018), a crisis management framework that places premium over their own expertise and capacity to resolve the crisis in their own terms proves to be significant. This is contrary to the traditional frameworks that rely on the supposed expertise of crisis management experts who may not be fully familiar or affected by the crisis situation, and are driven by profit production motives of the organizations they serve (Fraustino & Kennedy, 2018; Fearn-Banks, 2001). The decentering of management experts and spotlighting of the grassroots in forming a crisis resolution pave the way for crisis response strategies that value empathy, compassion, dialogue, and relations with the marginalized, and not with more powerful stakeholders holding capitalistic values instead.

Given the grassroots orientation of the proposed framework, dialogue with the affected publics that is facilitated with empathy and compassion becomes a crisis response strategy in itself (Kim, 2015). Such framework also allows the members of the grassroots to take over the crisis management process and become crisis managers themselves. This objective of the imagined alternative framework counters the grassroots erasure tendency of the dominant frameworks.

An upward Implementation among Caring Organizations

As response to the observation that crisis resolutions are implemented only downward in a linear manner, from the organization down to the publics, due to the functionalistic orientation of the dominant crisis frameworks—the proposed grassroots ethical framework imagines an upward implementation instead. Now that the crisis resolution and response strategies are already designed and initiated from the people at the bottom, the responses such as corrective actions should begin from the grassroots going upward until it reaches the organization that caused the crisis. This objective promotes the equal participation of organizations and the grassroots in resolving and preventing future crises—contrary to the functionalistic frameworks for crisis communication that simply treat the publics as mere receivers of and reactors to the strategies employed from above downward. Such objective not only evens out the power between the organizations and the grassroots, but also strengthens the relationship and allyship between the two. With organizations being seen as the equal partner of the grassroots, and vice versa, the resolution of the crisis becomes a collaborative and dialogic transaction (Kim, 2015). Again, this second objective of the imagined framework counters the functionalistic orientation of the dominant frameworks wherein the publics are treated merely as end receivers of an employed crisis response strategy from above.

A downward empowerment and care

As an alternative to the traditional frameworks that condition organizations to disempower the publics by providing them insufficient resources to survive the crisis—ultimately leading to the dependence of the publics on corporate resolutions from above—the proposed grassroots care ethics approach encourages organization to direct and concentrate resources and empowerment down to the grassroots. As argued in the care ethics framework, intentional care entails caring for the publics not simply to save face, but to genuinely promote their well-being and dignity. It is not sufficient that the crisis resolution is designed by the grassroots and implemented upward. Such crisis resolution must be actively supported by the very organizations that birthed the crisis situations similar to what Contreras-Pacheco (2018) had argued. In concentrating the resources at the grassroots level, organizations can ensure that the publics are properly empowered to lead the resolution and implement it upward, satisfying the first and second objectives of the imagined framework. This third objective counters the managerial bias of the dominant frameworks wherein the publics are mere market segments that need to be pacified.

Limitations of the Imagined GrassrootsvCare Ethics Framework

This section seeks to present several limitations that arise with the imagined grassroots care ethics framework. These limitations revolve around the challenges posed by existing corporatist and capitalistic interests among organizations, the level of efficacy and participation among the grassroots communities, and the affective and relational labor that the proposed framework requires for the implementation of an ethical crisis management and communication.

While the framework appears to be viable in theory, it cannot be denied that in reality, there exists a tension between an organization's social obligations to its stakeholders and their corporate interests that are strongly tied to profit-making. In addition, this capitalistic priorities tend to dominate, limit, and influence an organization's capacity to employ crisis responses that fulfill the requirements of the affected publics (Fearn-Banks, 2001; Fraustino & Kennedy, 2018). Complying with the *grassroots care ethics framework* that highlights and places affects and relationships above corporate interests, in such reality, would prove to be challenging.

Second, the proposed ethical framework, as opposed to traditional crisis management strategies, demands equal participation and motivation from the grassroots communities themselves. While organizations have historically taken charge of the crisis responses resulting from the functionalistic tendency of crisis communication, the proposed framework now expects active and proactive efforts from the end of the publics. The lack or even absence of motivation, efficacy, and participation among the grassroots would lead to the ineffectiveness of a grassroots-oriented crisis response.

Lastly, given the centrality of the affective and relational dimensions in the proposed framework, it follows that the resulting crisis response strategies would require additional affective and relational labor from both the organization and concerned grassroots community. Sustaining the positive emotions and the relationship with the involved parties contribute to the challenge of implementing the proposed framework.

Potential Applications of Imagined Grassroots Care Ethics Framework

Despite the aforementioned limitations, several crisis communication and management strategies may nonetheless be employed by organizations in adopting the grassroots care ethics framework. These include (1) engagement with grassroots organizations, (2) activation of

community leadership, (3) information cooperation with the public, and (4) intersectional crisis management.

In situations of crisis, organizations such as the government or private companies may not possess sufficient resources and networks to directly engage in an organization-public relationship with the grassroots (Wu et al., 2024). In such cases, non-government organizations that primarily involve and cater to the grassroots community can provide supplemental resources, mobilize members of the grassroots, and create more intimate links between organizations and the affected publics (Lu & Li, 2020; Bentzen and Torfing, 2022). More importantly, grassroots-focused non-government organizations may recommend and even help in implementing solutions and communications that are tailored to the physical, cultural, political, and human landscapes of the grassroots community (Wu et al., 2024). The existing trust between the grassroots organization and community can also aid in building similar trusting relationship between organizations and the publics.

In the absence of grassroots-focused organizations, the government or private companies may instead focus on activating community leadership among the grassroots in moments of crisis. This process begins by identifying and engaging with community leaders who are entrusted by the grassroots community to mediate between organizations and themselves, defend their interests and rights in the face of crises, lead empowerment initiatives, and mobilize their members when crisis resolutions are being implemented (Razzano & Bernardi, 2024; Boehm et al., 2010). In adopting the grassroots care ethics framework, organizations can opt to engage the service of community leaders not only to assist in the implementation, but also to acquire specific knowledge about the grassroots experiences amidst crisis.

The close and intentional exchange of information between organizations-in-crisis and the affected grassroots community during and after a crisis also serves an important role in crisis resolution. This exchange of information, also called information cooperation, enables organizations to appear as an approachable figure rather than rigid and aloof entities (Chen & Xu, 2023). The members of the grassroots community have also been found to be more skilled, proactive, and efficacious when actively engaged in information exchange by organizations (Chen & Xu, 2023). This information exchange not only enacts a two-way symmetrical communication, but also contributes to the formation and maintenance of intimate relationship between organizations and their respective publics.

By encouraging the examination of the physical, cultural,

political, and human landscapes of the affected grassroots community, the grassroots care ethics framework allows crisis management strategies to be intersectional in nature (Knepper et al., 2023). This intersectional crisis management, in turn, exposes the disempowerments, inequities, and dominances endured by the grassroots which better informs organizations and their care-oriented crisis resolutions (Baniya, 2025; Knepper et al., 2023). Recognizing the existing disempowerments among the grassroots community, organizations are also able to better orient their downward empowerment and care.

CONCLUSION

The traditional crisis communication frameworks—while extensive and established—ultimately center corporate interests at the expense of the grassroots and other marginalized publics. Rooted in their managerial bias and functionalistic view of crisis communication, these frameworks tend to treat crises as reputational threats to be managed rather than opportunities for ethical and meaningful engagement. The erasure of grassroots experiences and voices not only reflects a critical ethical failure but also limits the efficacy of crisis responses by rendering them disconnected from the lived realities of those most affected. This essay has demonstrated how dominant models privilege top-down, organization-led strategies that pacify rather than empower, and that fail to offer the care, dignity, and relational solidarity that ethical crisis communication should aspire to provide. In response, a grassroots care ethics framework has been proposed—one that inverts the traditional flow of crisis response by centering the needs, insights, and agency of the grassroots communities. Such a model begins at the bottom, moves laterally, and only then upward, thereby fostering a relational, affective, and empowering approach to crisis management.

While the grassroots care ethics framework offers a critical and transformative alternative to traditional crisis communication, its practical implementation is not without substantial challenges. The tension between corporate self-interest and social responsibility remains a significant barrier, particularly in systems driven by capitalist imperatives. Organizations may struggle to prioritize relational and affective commitments when profit motives dominate crisis decision-making. Additionally, the success of this framework relies heavily on the efficacy, motivation, and active participation of the grassroots themselves—an expectation that may not always be met due to structural disempowerment or lack of resources.

Furthermore, the affective and relational labor demanded by this framework—though ethically necessary—requires time, trust-building, and sustained engagement from both organizations and communities, making the process more labor-intensive than traditional top-down approaches.

Despite these limitations, the framework's potential remains promising. Through strategic partnerships with grassroots organizations, activation of community leadership, intentional information cooperation, and intersectional awareness, institutions can begin to embody more ethical and inclusive crisis responses. These methods not only help mitigate the framework's challenges but also point to actionable steps organizations can take to foster genuine, reciprocal relationships with affected publics. Ultimately, the grassroots care ethics framework demands a shift in values—one that places care, dignity, and empowerment at the heart of crisis communication. To create crisis communication strategies that are not only effective but just, organizations must decenter themselves and co-create solutions that genuinely emerge from and for the people.

REFERENCES

- Baniya, S. (2025). Intersectional disaster response in the globalized world via equitable crisis communication. *Journal of Business and Technical Communication*. <https://doi.org/10.1177/10506519251326565>
- Bauman, D. C. (2010). Evaluating ethical approaches to crisis leadership: Insights from unintentional harm research. *Journal of Business Ethics*, 98(2), 281–295. <https://doi.org/10.1007/s10551-010-0549-3>
- Benoit, W. L. (1997). Image repair discourse and crisis communication. *Public Relations Review*, 23(2), 177–186. [https://doi.org/10.1016/S0363-8111\(97\)90023-0](https://doi.org/10.1016/S0363-8111(97)90023-0)
- Bentzen, T., & Torfing, J. (2022). COVID -19-induced governance transformation: How external shocks may spur cross-organizational collaboration and trust-based management. *Public Administration*. <https://doi.org/10.1111/padm.12881>
- Boehm, A., Enoshm, G., & Michal, S. (2010). Expectations of grassroots community leadership in times of normality and crisis. *Journal of Contingencies and Crisis Management*, 18(4), 184–194. <https://doi.org/10.1111/j.1468-5973.2010.00617.x>
- Carroll, C. (2009). Defying a reputational crisis – Cadbury’s salmonella scare: Why are customers willing to forgive and forget? *Corporate Reputation Review*, 12(1), 64–82. <https://doi.org/10.1057/crr.2008.34>
- Chen, L., & Xu, N. (2023). Responding to crises collectively and cooperatively: The mechanism of “informative cooperation” by the Chinese government and the public in Weibo-based crisis communication between 2010 and 2019. *Journal of Contingencies and Crisis Management*. <https://doi.org/10.1111/1468-5973.12468>
- Cheney, G., & Christensen, L. T. (2001). Public relations as contested terrain: A critical response. *Handbook of Public Relations*, 167–182. <https://doi.org/10.4135/9781452220727.n12>
- Contreras-Pacheco, O. E. (2018). Care ethics and crisis communication: Examining two experiences in South America. *Cuadernos de Administración*, 34(62), 20–32. <https://doi.org/10.25100/10.25100/cdea.2018v34n62.6866>
- Coombs, W. T. (2001). Interpersonal communication and public relations. In R. L. Heath (Ed.), *Handbook of Public Relations*. SAGE Publications, Inc. <https://doi.org/10.4135/9781452220727>
- Coombs, W. T. (2007). Protecting organization reputations during a crisis: The development and application of situational crisis communication theory. *Corporate Reputation Review*, 10(3), 163–176. <https://doi.org/10.1057/palgrave.crr.1550049>

- Coombs, W. T. (2015). The value of communication during a crisis: Insights from strategic communication research. *Business Horizons*, 58(2), 141–148. <https://doi.org/10.1016/j.bushor.2014.10.003>
- Coombs, W. T., & Holladay, S. J. (2022). *The handbook of crisis communication*. Wiley.
- Curtin, P. A., & Gaither, T. K. (2005). Privileging identity, difference, and power: The circuit of culture as a basis for public relations theory. *Journal of Public Relations Research*, 17(2), 91–115. https://doi.org/10.1207/s1532754xjpr1702_3
- Diers-Lawson, A., & Pang, A. (2016). Did BP atone for its transgressions? Expanding theory on “ethical apology” in crisis communication. *Journal of Contingencies and Crisis Management*, 24(3), 148–161. <https://doi.org/10.1111/1468-5973.12110>
- Duffy, M. E. (2000). There’s no two-way symmetric about it: A postmodern examination of public relations textbooks. *Critical Studies in Media Communication*, 17(3), 294–315. <https://doi.org/10.1080/15295030009388397>
- Dutta-Bergman, M. J. (2004). Poverty, structural barriers, and health: A Santali narrative of health communication. *Qualitative Health Research*, 14(8), 1107–1122. <https://doi.org/10.1177/1049732304267763>
- Fearn-Banks, K. (2001). Crisis communication: A review of some best practices. In R. L. Heath(Ed.), *Handbook of Public Relations*. SAGE Publications, Inc. <https://doi.org/10.4135/9781452220727>
- Fraustino, J. D., & Kennedy, A. K. (2018). Care in crisis: An applied model of care considerations for ethical strategic communication. *The Journal of Public Interest Communications*, 2(1), 18. <https://doi.org/10.32473/jpic.v2.i1.p18>
- Gilligan, C. (1977). In a different voice: Women’s conceptions of self and morality. *Harvard Educational Review*, 47(4), 481–517. <https://doi.org/10.17763/haer.47.4.g6167429416hg510>
- Hearit, K. M. (2006). *Crisis management by apology: Corporate response to allegations of wrongdoing*. Routledge.
- Ilie, O. (2021). Communication ethics: An others-centered approach to crisis communication. *International Conference KNOWLEDGE-BASED ORGANIZATION*, 27(2), 144–149. <https://doi.org/10.2478/kbo-2021-0063>
- Johnson, C. E. (2018). *Meeting the ethical challenges of leadership: casting light or shadow*. SAGE Publications, Inc.
- Karlberg, M. (1996). Remembering the public in public relations research: From theoretical to operational symmetry. *Journal of Public Relations Research*, 8(4), 263–278. https://doi.org/10.1207/s1532754xjpr0804_03

- Kim, I., & Dutta, M. J. (2009). Studying crisis communication from the subaltern studies framework: Grassroots activism in the wake of Hurricane Katrina. *Journal of Public Relations Research*, 21(2), 142–164. <https://doi.org/10.1080/10627260802557423>
- Kim, Y. (2015). Toward an ethical model of effective crisis communication. *Business and Society Review*, 120(1), 57–81. <https://doi.org/10.1111/basr.12048>
- Knepper, H. J., Evans, M. D., & Henley, T. J. (2023). *Intersectionality and crisis management*. Taylor & Francis.
- Kohlberg, L. (1973). Stages and aging in moral development: Some speculations. *The Gerontologist*, 13(4), 497–502. <https://doi.org/10.1093/geront/13.4.497>
- Latosa, A. C. (2020). *“To be poor is to be killed” in the drug war in the Philippines: A culture-centered view of crisis communication from below*. [Unpublished manuscript]. National University of Singapore.
- Liu, B. F. (2007). President Bush’s major post-Katrina speeches: Enhancing image repair discourse theory applied to the public sector. *Public Relations Review*, 33(1), 40–48. <https://doi.org/10.1016/j.pubrev.2006.11.003>
- Lu, Y., & Li, Y. (2020). Cross-sector collaboration in times of crisis: Findings from a study of the funing tornado in China. *LOCAL GOVERNMENT STUDIES*, 46(3), 1–24. <https://doi.org/10.1080/03003930.2019.1677626>
- Nakagawa, Y., & Shaw, R. (2004). Social capital: A missing link to disaster recovery. *International Journal of Mass Emergencies and Disasters*, 22(1), 5–34. <https://doi.org/10.1177/028072700402200101>
- Noddings, N. (1984). *Caring: A feminine approach to ethics and moral education*. University of California Press.
- Razzano, C. C., & Bernardi, M. (2024). Empowering urban resilience: Grassroots volunteering for a renewed shock-response governance in post-pandemic Milan. *Urban Governance*. <https://doi.org/10.1016/j.ugj.2024.12.006>
- Roper, J. (2005). Symmetrical communication: Excellent public relations or a strategy for hegemony? *Journal of Public Relations Research*, 17(1), 69–86. https://doi.org/10.1207/s1532754xjprr1701_6
- Sellnow, T. L., & Ulmer, R. R. (1995). Ambiguous argument as advocacy in organizational crisis communication. *Argumentation and Advocacy*, 31(3), 138–150. <https://doi.org/10.1080/00028533.1995.11951607>
- Simola, S. (2003). Ethics of justice and care in corporate crisis management. *Journal of Business Ethics*, 46(4), 351–361. <https://doi.org/10.1023/a:1025607928196>

- Vardeman-Winter, J., Lyn, R., & Sharma, R. (2014). *Survivor-to-survivor communication model: How organizations can use post-disaster interviewing to facilitate grassroots crisis communication*. [Unpublished manuscript]. University of Houston.
- Wu, X., Qin, W., & Li, Y. (2024). Passive cooperation or active coproduction? Grassroots NGOs' strategies in interactions with government in crisis management in Chengdu, China. *Local Government Studies*, 1–31. <https://doi.org/10.1080/03003930.2024.2360575>

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