

A report by









InflueAnswers is a research and strategic communications consulting firm focusing on driving digital transformation in MENA. InflueAnswers deploys innovative techniques in the field of research and communications, pushes for data-driven approaches, and builds data-driven strategies to help clients achieve their goals in their respective sectors.



THE SAMIR KASSIR FOUNDATION

The Samir Kassir Foundation is a Lebanese non-profit organization, which aims to spread democratic culture in Lebanon and the Arab world, encourage new talents in journalism, and build the movement for cultural, democratic, and secular renewal. The Foundation's SKeyes Center for Media and Cultural Freedom has become the largest center monitoring violations against journalists and artists in the Arab Levant, as well as a reference for research on journalism and for training media professionals and enhancing their skills.



The Friedrich Naumann Foundation for Freedom (FNF) is the German Foundation for Liberal Politics. Established in 1958 by Theodor Heuss, the first President of the Federal Republic of Germany, FNF promotes liberal values; above all freedom of the individual in their pursuit of happiness. FNF promotes liberal thinking and policies in cooperation with its local partners through civic education, international political dialogue, and political counseling. Within Lebanese civil society, the Foundation's work aims at contributing to building a state of law, fighting corruption, promoting good governance, and supporting participation in local politics.

Author and lead researcher:

Ralph Baydoun

Research team:

Rayane Ghafouri Sara Hteit Christina Yammine Sawab Fact-Checking Group

Lead data consultant: Michel Semaan

Data engineer: **Manwell Hanna**

Data entry: **Aya Haidar**

Copywriting: **Tulay Ghandour**

Editing: Samer Abdallah and Karla Jubaily

Supervision: Ayman Mhanna

TABLE OF CONTENTS

I. INTRODUCTION	5
I.1 CONTEXT AND BACKGROUND	5
I.2 OBJECTIVES	6
I.3 THEORY OF CHANGE	6
II. METHODOLOGY	7
III. KEY FINDINGS	16
III.1 THEME ANALYSIS	16
III.2 NARRATIVE ANALYSIS	31
III.3 WHATSAPP GROUP ANALYSIS	35
IV. CONCLUSION	39

I. INTRODUCTION

I.1 CONTEXT AND BACKGROUND

The integration of WhatsApp into our daily lives has revolutionized the way we communicate, stay informed, and connect with others, thus reshaping the landscape of political discourse.

While mainstream TV remains the most popular form of mass media in Lebanon, frequent power cuts and the need for up-to-date news have led people to rely more on social media and instant messaging platforms, particularly WhatsApp. This increased reliance has made people more susceptible to the impact of dis- and misinformation from unverified news sources. In fact, a study conducted by the International Committee for the Red Cross (ICRC) in 2023, which the authors were able to review, revealed that Lebanese households prioritize reducing their electricity consumption to ensure uninterrupted cellular data access.

According to a 2018 poll by the Pew Research Center, 84% of Lebanese adults use WhatsApp as a communication tool, surpassing countries like Jordan, Mexico, and the Philippines (Mordecai, 2019)². The same study also found that in 2019, 52% of Lebanese respondents trusted the information they received from social media more than from local television and newspapers (Wee & Li, 2019; Mordecai, 2019).³

The October 2019 protest movement exposed the deep distrust in and animosity towards partisan and privately-owned mainstream media that aligned with the agendas of sectarian political parties (Bakr et al., 2020).⁴ As a result, there has been a greater reliance on independent digital media, social media channels and platforms such as Instagram and Twitter, and informal, hyperlocal, newsfocused WhatsApp groups (Arab Barometer, 2021; Bakr et al., 2020; Dennis et al, 2).⁵

¹ ICRC Lebanon 2023 perception study where 1,000 households across Lebanon were interviewed.

² Mordecai, M. (2019, November 19.). Protests in Lebanon highlight ubiquity of WhatsApp, dissatisfaction with government. Pew Research Center. https://www.pewresearch.org/fact-tank/2019/11/19/protests-in-lebanon-highlight-ubiquity-of-whatsapp-dissatisfaction-with-government/

Wee, J. & Li, S. (2019). Politics and social media in the Middle East and North Africa: Trends and trust in online information. Arab Barometer, Princeton University. https://www.arabbarometer.org/wp-content/uploads/AB_Media_Report_Final_Public-Opinion-2019-5.pdf

Bakr, J., Safieddeen, K., & Safwan, J. (2020, December 29). *Independent media in Lebanon: Content analysis and public appeal.* Skeyes Center for Media and Cultural Freedom [White Paper]. https://www.skeyesmedia.org/documents/bo_filemanager/Independent-Media-in-Lebanon-EN.pdf

⁵ Arab Barometer (2021). Arab Barometer VI: Lebanon country report. https://www.arabbarometer.org/wp-content/uploads/Public-Opinion-Lebanon-Country-Report-2021-En-1.pdf

Since 2019, Lebanon has faced a series of crises that have attracted significant media coverage. Throughout these events, a substantial amount of dis- and misinformation has circulated, often propagated via WhatsApp. However, one area that has been largely overlooked in Lebanon is a comprehensive study of patterns of disinformation, misinformation, and hate speech. This project aims to address this gap by conducting a large-scale, data-centric analysis of these trends across the most popular breaking news-focused WhatsApp groups.

I.2 OBJECTIVES

By analyzing public news-oriented WhatsApp groups at a national level, this report seeks to achieve the following objectives:

- 1. Gain insights into the themes of the conversation and determine whether group agendas perpetuate harmful narratives.
- 2. Identify patterns of disinformation, misinformation, and hate speech by examining news received by a sample of citizens from various regions across the country.
- Measure the reach and impact of disinformation, misinformation, and hate speech achieved through these groups.

I.3 THEORY OF CHANGE

Through an examination of the news circulated on public news-oriented WhatsApp groups and its reception by a representative sample of Lebanese residents across all governorates, this analysis aims to identify instances of context-based disinformation, misinformation, and hate speech. By unraveling the underlying motives behind such content and understanding its spread and reach, local and international actors working for a healthier news ecosystem can work towards mitigating its impact and promoting media literacy among the Lebanese population.

II. METHODOLOGY

This project employs a methodology that combines quantitative and qualitative approaches, utilizing both human expertise and artificial intelligence (AI). It is important to note that the project strictly adheres to local and international data protection standards, including the European Union's General Data Protection Regulation (GDPR)⁶ to safeguard the privacy and security of all participants involved in the study.

To identify WhatsApp groups disseminating news across all governorates in Lebanon, we leveraged the Samir Kassir Foundation's "Inclusive Media, Cohesive Society" (IMeCS) program and conducted focus groups with members of IMeCS's "Pluralism Elves" project. Through desk research and the focus groups, we successfully mapped out the landscape of relevant WhatsApp groups in Lebanon.

An initial analysis was conducted to select WhatsApp groups that met specific criteria. This involved identifying open public groups with active members limited to administrators, and a minimum message frequency of 20 news messages or data points per day. Groups associated with popular news outlets were excluded to focus on grassroots communities.

Cross-regional groups were then examined to determine whether they shared the same content or had different editorial lines. This approach ensured a diverse representation of WhatsApp news groups in the study.

The selected quantitative sample consisted of 37 groups, collectively reaching a total of 59,653 users. These groups were spread across seven governorates in Lebanon: Beirut, Bekaa, North Lebanon, South Lebanon, Mount Lebanon (including Metn, Baabda, Aley, and Shouf), and Kesrwan-Jbeil.

Concurrently, a qualitative sample was obtained through the active participation of individuals in the "Pluralism Elves" project. Over the course of a month (31 days), from February 20 to March 22, 2023, participants shared with us daily news they received on WhatsApp from various sources such as friends, family, and colleagues. This approach allowed us to gain insights into the types of news that were actively engaged with and forwarded, as well as the conversion rates of different news types.

⁶ General Data Protection Regulations. https://www.mrs.org.uk/pdf/GDPR%20In%20Practice%20Vol%201%20 WhatsApp%20in%20compliance%20with%20GDPR.pdf

By adopting this multi-pronged methodology, we achieved a holistic understanding of how information permeates through individuals and communities. Moreover, we have examined the reach of different WhatsApp groups initially mapped in specific governorates and observed the subsequent spread of conversations to other areas. Some groups, identified with the same name but numbered differently, form a larger network of groups with websites and a presence on multiple social media platforms.

Group Selection:

Region	WhatsApp Groups	Number of Participants ⁷	Logo
	Lebanon Mirror 5	939	LEBANON MIRROR NEWS SITE
	خبر عاجل Khabar Aajel	2925	ن بر خبر عاجـل
Beirut	961Times [420]	200	961 TIMES
	Achrafiehnews 26	382	Chrafieh News _{org}

Region	WhatsApp Groups	Number of Participants ⁷	Logo
	أخبار التحرّي Al Taharri	951	Al Taharri
	موقع صدى الضاحية 313 Sada Dahie	675	in the requirement of the second sec
	(4) أبناء بيروت الإخبارية Abna' Beirut	1817	September 1
	Beirut Daily News	857	DAILYNEWS

Region	WhatsApp Groups	Number of Participants ⁷	Logo
	مياديـن المقاومة Mayadeen Al- Muqawama	504	<mark>مــيـــاديـــن</mark> المقاومة الإخبارية
	اخبار لبنان والفاكهة Akhbar Lubnan wal Fakiha	599	
Bekaa	Lebanon Now	947	LEBANON NOW
	Lebnan News	683	LEBNAN Jews
	طابرینا نیوز 4 Sabrina news	966	Sabrina news صابر بنا نیونر

Region	WhatsApp Groups	Number of Participants ⁷	Logo
البنان 358 JADIDOUNA NEWS -2 938 Kesserwen & Byblos Enooma – 9 918 39 ثوة وجع الإنسان و 9 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	هنا لبنان	358	منالبنان
	CLADIDOUNA		
	Enooma – 9	918	النسمة الالكترونية NOOMA
	39 ثورة وجع الإنسان Thawrat Wajaa al-Insan	340	مورة وجع الله نسان
Mount Lebanon	Daily News – 5	842	DAILY NEWS LB

Region	WhatsApp Groups	Number of Participants ⁷	Logo
	961TODAY.COM 112	813	961today.com
	RECEIVE LEBANON® 1	916	Receive LEBANON NEWS SITE
South	لبنان والعالم { 13 } Lebanon and the World	610	alelgi Liul www.lebanonandtheworld.com
	Arab Independent News 1	3158	ARAB العربي المستقل DEPENDENT
	8 Lebanese Citizens News	1004	LEBANESE CITIZENS NEVS

Region	WhatsApp Groups	Number of Participants ⁷	Logo
	موقع الفيحاء 8 ALFAYHAALB	353	الفيحاء الق
	نبأ على مدار الساعة Nabaa Media Group	825	مجموعة نبأ الإعلامية NABAA MEDIA GROUP
North	المَرْصَد الإخبَاري 153 Al-Marsad Al-Ikhbari	922	الهرصد الإخباري
	Tripoli L.B.N	100	LEBANON TRIPOLILBN.COM
	اخبار لبنان Akhbar Lubnan	990	

Region	WhatsApp Groups	Number of Participants ⁷	Logo
	أخبار بيروت والعالم Akhbar Beirut wal Aalam	990	أخبار بيروت والعالم
	التحري نيوز Altahhari News	978	is a single size of the size o
	أخبار المستقبل 4 Akhbar al-Mustaqbal ⁸	1631	نجا تحره لازمه
Unknown (Groups that were added 9 days into the process to increase sample size)	أخباري 50 Akhbari	529	أخبارت
sample size)	NEWS FOR LEBANON	127	BRANG

⁸ It was noticed later in the process that أخبار المستقبل was renamed منسقية صيدا المستقبل, which refers to Saida in the South governorate.

العـجـلــة الإخـبارية Almajala	386	الإخبارية الإخبارية Almajala.news
أخبار كُن مواطِن Kun Muwaten	585	ڪن مواطن
حصل اليوم في لبنان 1-Hasala Al Yawm	763	حصل اليوم في لبنان (10) 조 Group
الديار Addiyar	255	الذب

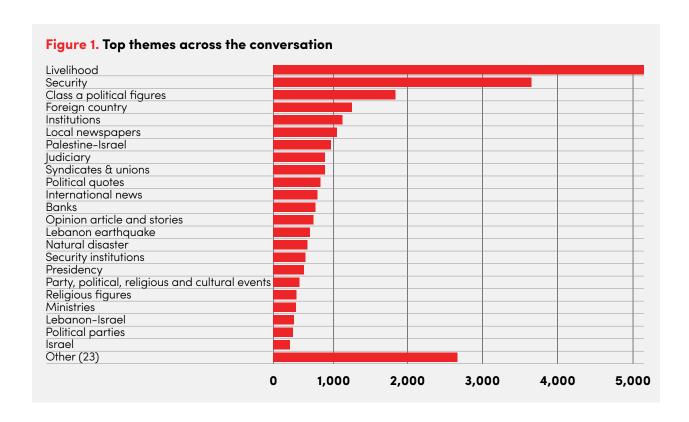
III. KEY FINDINGS

III.1 THEME ANALYSIS

After analyzing 36,113 news message or data points (DPs), the news collected from the WhatsApp groups was categorized into several prominent themes that reflect the pressing concerns of Lebanese citizens or recurrent areas of interest of the media. The dominant themes observed are as follows:

- 1. Livelihood: This theme encompasses issues related to the currency exchange rate, access to basic necessities such as food and shelter, education, and the availability of electricity.
- 2. Security: The security theme focuses on potential threats faced by the country, crime rates, and the role of law enforcement in maintaining public safety. It highlights the concerns and anxieties surrounding personal security and the overall stability of the nation.
- 3. Politicians: This theme revolves around the activities of politicians, including their rivalries, debates, and public positions on various issues. It reflects the influence of political figures on public opinion and decision-making.
- 4. Foreign countries: The fourth theme explores the interference of foreign countries in Lebanese affairs and their potential role in harming or helping the country. It encompasses discussions on international relations, aid, and the impact of foreign actors on Lebanon's political and economic situation.

The content analysis also revealed other topics of conversation, including: syndicates and professional unions, banks, the judiciary system, various public institutions, statements by religious figures and religious events, statements by or coverage of the security institutions and law enforcement activities, Palestine, Israeli internal politics and Israeli aggressions, and the earthquake in Turkey and other seismic activities in the region.



By analyzing the themes and news surrounding specific incidents that occurred during the monitoring period (February 20 – March 22, 2023), we successfully identified various aspects within the WhatsApp groups. These findings shed light on group affiliations, the originality of content, the spread of unverified information, engagement in sharing mis- and disinformation, as well as the propagation of fear.

The analysis allowed us to determine the affiliations of different groups, providing insights into their specific interests and affiliations with political parties or regional political leaders. Understanding these affiliations helps in deciphering the underlying motives and potential biases within the groups.

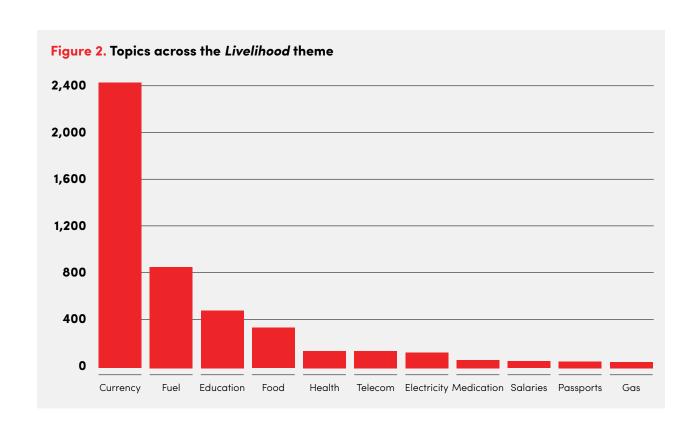
Additionally, we assessed the originality of the content shared within the WhatsApp groups. This analysis aimed to identify whether the information circulated was sourced from reputable news outlets or if it originated from unverified or questionable sources. Unverified information can contribute to the spread of mis- and disinformation, which can have significant societal implications. By observing the patterns of information sharing and evaluating the credibility of the sources, we gained insights into the prevalence and impact of false or misleading information within these communities.

Lastly, the analysis addressed the issue of fear propagation. It examined how certain incidents or narratives within the WhatsApp groups contributed to fearmongering among participants. Understanding the mechanisms through which fear is spread can help develop strategies to counteract its negative effects and promote more informed and constructive conversations.

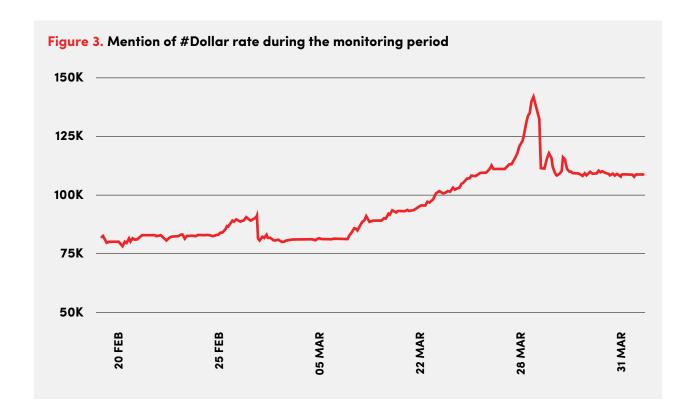
A. Livelihood

Within the *Livelihood* theme, the news topics that emerged from the analysis of WhatsApp groups included:

- Currency Rates: Discussions centered around the exchange rate of the Lebanese pound, reflecting the impact on purchasing power and the economy at large.
- Fuel Prices: This topic encompassed updates and discussions on the prices of fuel, including gasoline and diesel.
- Education Sector: News within this category covered various aspects of the education sector, such as teachers' strikes, disruptions in school operations, and updates on official exams. These discussions reflect the concerns and challenges faced by students, parents, and educators.
- Food Prices and Food Safety: WhatsApp groups shared information regarding fluctuations in food prices, including the cost of essential items. Additionally, incidents of expired or adulterated food were reported, drawing attention to food safety issues.
- Health Sector: This category included discussions on access to healthcare services, shortages of medications, and updates on healthcare policies.
- Telecom Sector: WhatsApp conversations touched upon topics such as prices of mobile services, strikes by the sector's employees, and issues related to connectivity.
- Electricity: Updates on electricity prices and rationing were shared within the groups.



 Among the sub-themes within the Livelihood theme, currency rates emerged as the most prominent topic. The data collected during the monitoring period offered valuable insights into currency rate fluctuations, providing an alternative perspective in the absence of official tracking measures.



- 2. The analysis of timestamps for mentions of the word #Dollar revealed irregularities that occurred during the monitoring period. By cross-referencing the news about the currency rates shared on WhatsApp groups with historical data from Lirarate.org,⁹ we observed a correspondence between the two.
 - The WhatsApp groups tended to report more frequently on the Lebanese Pound (LBP) losing value against the dollar than gaining it.
 - Groups in North Lebanon provided the most extensive coverage of currency exchange rates.
 - The news about currency rates shared on WhatsApp groups appeared to report the LBP losing value to the dollar at rates slightly higher (between 0.005 cents and 0.02 cents) than what was recorded on Lirarate.org.

⁹ The only public website tracking the Lebanese black market currency rates with a historical data

3. The usage of terms indicating significant change, such as "increase" (ارتفاع) mentioned 2,300 times and "big" (كبير) mentioned 1,618 times, was prevalent during the monitoring period. Speculation and fear were common driving forces behind these types of news, which frequently lacked clear sources and often began with vague references such as "an economist" or "prominent financial circles." While the content primarily warned about potential negative outcomes, some news also offered unsubstantiated positive predictions. The use of terms like "الإنهيار الكبير" ("the big collapse") in warning-styled messages may have created an impression that more significant challenges lie ahead, influencing individuals' acceptance of the current circumstances and contributing to certain purchasing trends.

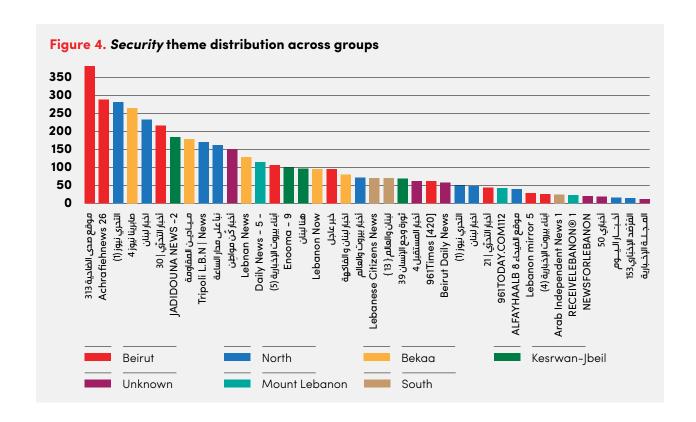
Examples of unsubstantiated news:

- An Arab country intends to place a huge amount of money as a bank deposit for Lebanon whenever it feels that a major collapse will occur. 961 Times [420], 31 لبنـان والعالـم, Lebanese Citizens News 8, 30 أخبار التحرى
- Why you should keep your dollar bill. 13 } لبنان والعالم
- More than one economist warn that the prices of commodities and foodstuffs will be skyrocketing in the month of Ramadan due to the dollarization of prices in supermarkets.
 - صابرينا نيوز 4 , أخبار التحري 30
- On video, terrifying expectations about the dollar rate in Lebanon: daily jumps of up to 15 thousand, until it reaches one million pounds. 961 Times [420], Achrafiehnews 26

B. Security

Within the Security theme, the analysis revealed the following topics of discussion:

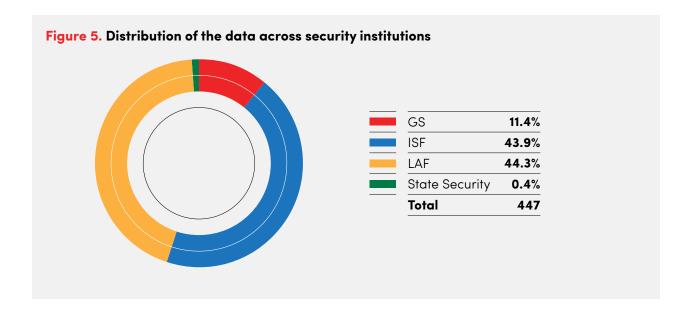
- Violence and Crime: This topic encompassed incidents such as shootings, robberies, and miscellaneous illicit actions.
- Accidents and Disasters: The discussions revolved around public safety threats such as fires and car accidents.
- Social Unrest and Protests: This topic involved discussions around public demonstrations, sit-ins, and collective actions.
- Security Measures and Concerns: Conversations revolved around actions taken by the authorities to maintain security, such as arrests, law enforcement operations, and traffic control measures.



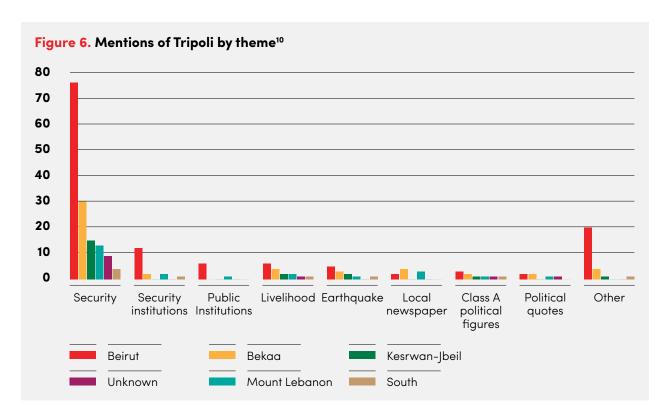
In the analysis of security-related news shared on WhatsApp groups, several notable findings emerged:

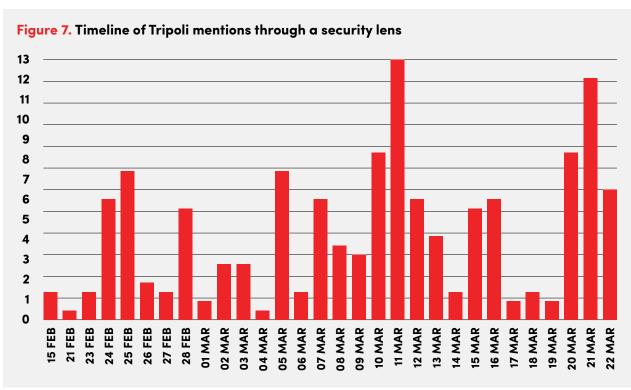
- 1. **Group activity:** The Beirut-based group, 313 موقع صدى الظاحية, stood out as the most active in sharing security-related news, with a total of 366 messages. It was followed by Achrafiehnews 26 also based in Beirut, with 277 security-focused news items. التحري نيوز from the North ranked third, sharing 270 news items.
- 2. Conversions and shares: Security-related news demonstrated the highest number of conversions and shares among WhatsApp groups and individuals across the country, as indicated by cross-checking data from the quantitative monitoring of groups and the qualitative sample shared by the "Pluralism Elves." This suggests that security-related topics are of significant interest and importance to WhatsApp users in Lebanon in the current context.
- 3. Presence of security institutions in the news: Most WhatsApp groups shared information about arrests published on the social media pages of the Internal Security Forces (ISF) and the Lebanese Armed Forces (LAF). Some groups focused more on one institution than the other. It is worth noting that certain arrests covered by specific WhatsApp groups, such as Sabrina News and Naba' Ala Madar al-Saa, were not reported on either the ISF or the LAF pages. For instance, one arrest was conducted by Lebanese Army Intelligence, which does not have an online social media presence. The quasi-simultaneous dissemination of these news items suggests the possibility of plagiarism, coordination between groups, or prompt notifications from the ISF and LAF to the group administrators.

4. Security institutions' message distribution: The LAF had the highest number of messages shared on WhatsApp groups, with 198 messages. The ISF followed closely with 196 messages. The General Security accounted for 51 messages, while the State Security had only two messages.



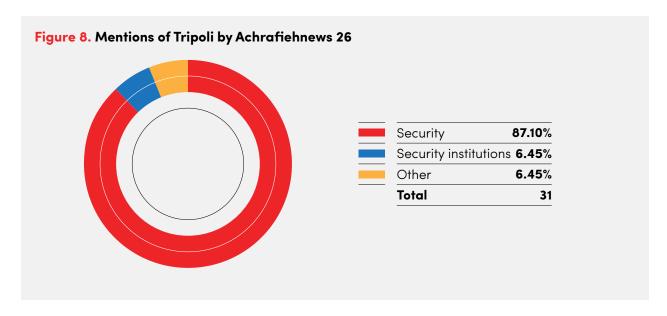
5. Portrayal of Tripoli: Despite being the second-largest city in Lebanon, Tripoli is frequently portrayed in a negative context within the WhatsApp news ecosystem, particularly concerning the Security theme, including information around crime, violence, and social unrest. Tripoli was mentioned 315 times in groups located outside of the North governorate, with 164 (52%) of those mentions solely focused on security-related matters. These news items encompassed a range of incidents including shootings, road blockings, arrests, fires, car accidents, murders, and robberies. This pattern persists even among groups based within Tripoli itself. The prevalence of this unbalanced representation, primarily highlighting negative aspects, has contributed to the promotion of a perception that Tripoli is a hub for extremism and violence. This perception has been shaped by and echoed in the media, and nurtured over a decade of internal conflicts and the association of the city with the Syrian conflict.



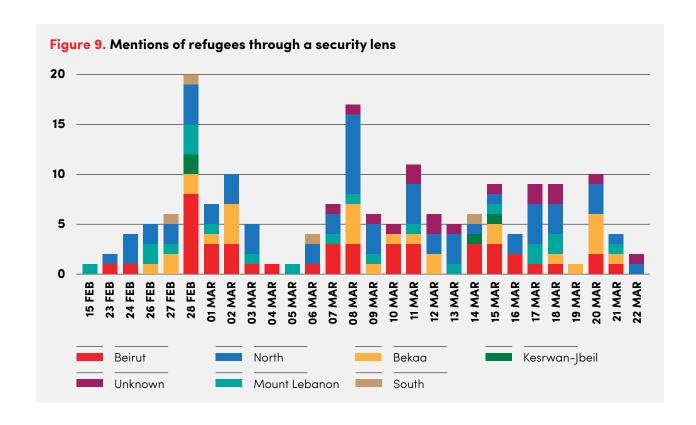


¹⁰ Note: Security and security institutions were tagged differently because the former encompasses security incidents and the latter includes press releases from the security and law enforcement institutions such as the Internal Security Forces, the Lebanese Armed Forces, General Security, and State Security.

As an example illustrating the unbalanced representation of Tripoli in the WhatsApp news ecosystem, we found that in the Achrafiehnews 26 group, out of 31 mentions of Tripoli, 30 of them were related to security-related news.

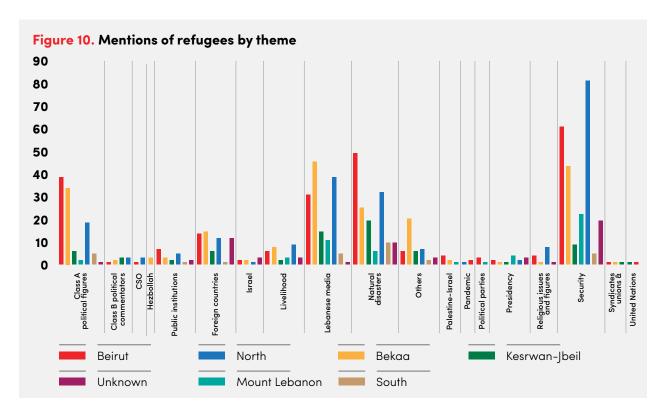


6. Portrayal of refugees: The analysis of the WhatsApp groups reveals a consistent portrayal of Syrian refugees from a security perspective. The timestamp data indicates that such news mentions related to Syrian refugees were shared almost daily throughout the entire monitoring period in every governorate.



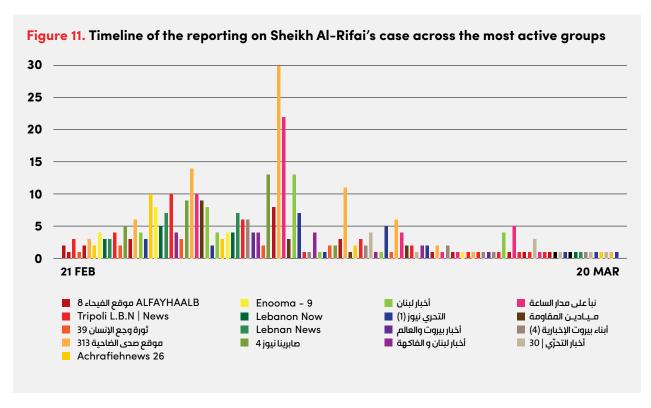
Examples of portrayal of Syrian refugees:

- An armed Syrian in Batroun! اخبار لبنان
- Statement: The municipality of Al-Qaa decided to deport eight Syrian displaced persons for compromising the security of the town and its surroundings. 1-
- Incident between Syrian displaced persons and Lebanese... gunfire and injuries... نبأ على مدار الساعة,. (5) الجبار لبنان , أبناء بيروت الإخبارية (5)
- Organized gangs of Syrian displaced persons are operating in Lebanon in a professional manner... Here is what was reported in the press. In Zahle: 30 Syrians attack Chamsine bakeries.
 Enooma - 9



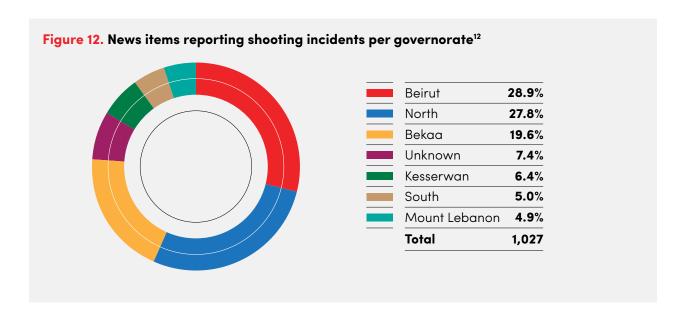
- 7. The kidnapping of **Sheikh Ahmed Al-Rifai** on February 20, 2023, and his subsequent murder, had significant political ramifications. Sheikh Al-Rifai was a prominent local figure known for his opposition to Iran and Hezbollah. The event unfolded as follows:
 - The news of Sheikh Al-Rifai's disappearance quickly spread on social media, particularly on Twitter.
 - During the first days after the incident (February 21-24), Twitter saw the emergence of early allegations implicating the Iranian Revolutionary Guard Corps, Hezbollah, and the Lebanese General Security in the kidnapping. However, these specific claims did not circulate on WhatsApp.
 - The incident gained significant national media attention when MTV featured the story on February 24.

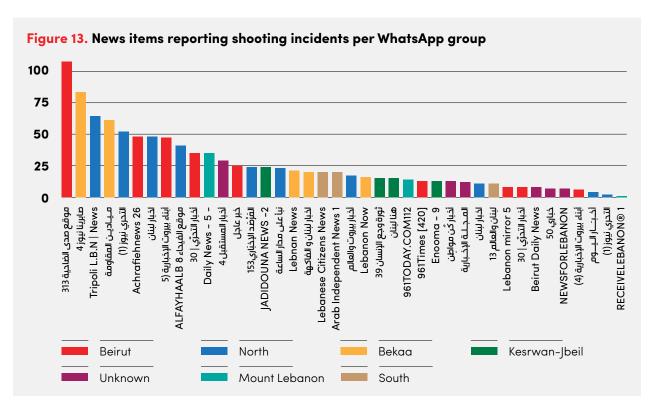
- Lebanese authorities, specifically the ISF, made a breakthrough in the case the day after MTV's coverage, apprehending the group responsible for the abduction and murder.
- Prior to the ISF operation and in response to a rising anti-Hezbollah campaign in the public discourse, the WhatsApp group 313 apace, known for its pro-Hezbollah inclinations, actively covered the incident. They shared a statement from General Security, which denied their involvement in the abduction. Additionally, Sabrina News and a pro-Hezbollah journalist Radwan Mortada circulated unverified information during this time, seemingly aimed at muddying the waters and casting doubt on the circumstances surrounding Sheikh Al-Rifai's disappearance. Sabrina News claimed that Sheikh Al-Rifai faces a number of arrests warrants "due to fraud," and that it was "likely that he is hiding from public view." Mortada published a supposed document of a marriage accord between Al Rifai and an unknown woman who allegedly lured him into a trap and got him kidnapped.
- Hyperlocal WhatsApp groups, such as Al Fayhaa and TNN, played a crucial role in reporting about the incident. Interestingly, the first report regarding Sheikh Al-Rifai's disappearance originated from groups within the region where he resided. This observation highlights the potential of local community groups to deliver timely updates that outpace national news outlets in certain situations.



8. In a single month of monitoring, the content analysis revealed a significant number of reported incidents, including 18 cases of murders, 13 deaths resulting from car accidents, two deaths by drowning, 11 suicides, and seven failed suicide attempts.

¹¹ Public perception tends to portray General Security as aligned with Hezbollah.





¹² Note: Unknown is a collection of 4 groups added to the analysis one week after the start of the initial monitoring exercise to enlarge the sample. Two of these groups' location was later found: one in Saida (South) and one in Beirut.

- 9. Sensitive content and ethical considerations: A concerning observation was the frequent sharing of pictures, voice notes, or other personal materials related to incidents of suicide on WhatsApp groups. It was evident that explicit consent from the family of the deceased was often not obtained before disseminating such content. Additionally, these groups frequently shared graphic images or videos without providing appropriate warnings or sufficient context. The sharing of such explicit and graphic images and violent content without consideration for the potential impact on viewers raises ethical concerns. These images and videos have the potential to evoke fear, stress, and even trauma among individuals who come across them.
- 10. Atmosphere of fear: The prevailing atmosphere within WhatsApp groups was characterized by news containing speculations and fear. Many groups consistently highlighted a sense of instability, looming threats, and the potential chaos in Lebanon. Headlines and contents often invoked fear by touching on issues such as the security breakdown in the Bekaa, the possibility of the public resorting to self-security measures, imminent threats of violence in Tripoli, the risk of spiraling into an uncontrolled situation due to financial deterioration, the anticipation of an armed conflict with an abundance of fighters and weapons, the potential for a Shia uprising, the perception of law enforcement bodies losing control, unexpected assassinations, and an overall sense of complete collapse and loss of security control. These examples create a climate of anxiety and uncertainty, contributing to the pervasive feeling of fear among the population.

Examples of fearmongering content:

- Is self-security the solution to the security breakdown in the Bekaa? |ADIDOUNA NEWS -2
- Will the Lebanese resort to self-security? Enooma 9
- Threats in Tripoli... and the trigger in Ramadan. اخبار لبنان
- Lebanon's security is on thin ice. Section #Today #Lebanon to watch, click on the following link.93 ثورة وجع الإنسان
- 🔳 Security warning along the financial deterioration: A descent without brakes. 93 ثورة وجع الإنسان
- The axis of resistance is preparing for the decisive war: The number of fighters is larger than needed, and weapons and missiles only need organization! 961Times [420]
- الخباركُن مواطن (Will there be a Shia uprising? (Video) أخباركُن مواطن
- The illusion that "the situation is under control"! اخبار لبنان
- Johnny Mounayer provides shocking information: Sudden assassinations are possible, and there are rogue terrorist groups.. This is how Hezbollah's weapons will disappear.

 961Times [420]
- Total collapse at the door and "better safe than sorry in Lebanon"... Security forces are getting ready! 5 أبناء بيروت الإخبارية
- The security breakdown is expanding its scope... Security is not under control. Tripoli L.B.N | News

C. Earthquake

The theme of earthquakes has emerged as a significant topic within WhatsApp groups, after the earthquake that destroyed large part of Turkey and northwestern Syria on February 6, 2023. Earthquake-related news is further sub-categorized into local aftershocks felt in Lebanon and news about earthquakes in Turkey and other countries. When consolidated, earthquake-related news rank sixth among the most widely shared themes. However, the discussions surrounding earthquakes are often marked by speculative information and unreliable sources, contributing to the spread of fear and misinformation among the public.

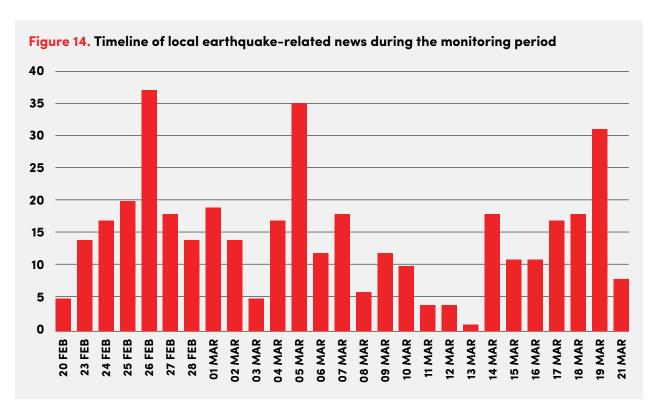
- 1. All WhatsApp news groups tend to circulate information and predictions about earthquakes based on statements from individuals who are not necessarily recognized experts in the field. A considerable number of messages attribute earthquake predictions to the so-called "Dutch expert" or "Dutch scientist," referring to Frank Hoogerbeets. However, it is crucial to highlight that Hoogerbeets is not a credentialed seismologist, and his alleged prediction of a 7.5 magnitude earthquake in Syria and Turkey three days before the actual event occurred is unsubstantiated. Furthermore, predictions made by individuals like Michel Hayek and Layla Abdellatif, who are Lebanese psychics, also find their way into the WhatsApp groups' news. The aforementioned predictions should be categorized as misinformation given that earthquakes cannot be accurately predicted. The dissemination of such unreliable information and presenting these individuals as experts can instill fear among citizens and lead them to consider dubious individuals as reliable sources of news.
- 2. In the 313 موقع صدى الضاحية group, 49% of earthquake-related news shared contribute to spreading fear, often by relying on speculations or unreliable sources such as Hoogerbeets. The other half of the shared content covered earthquake aftershocks and their consequences, typically evoking a similar emotional response among the audience.

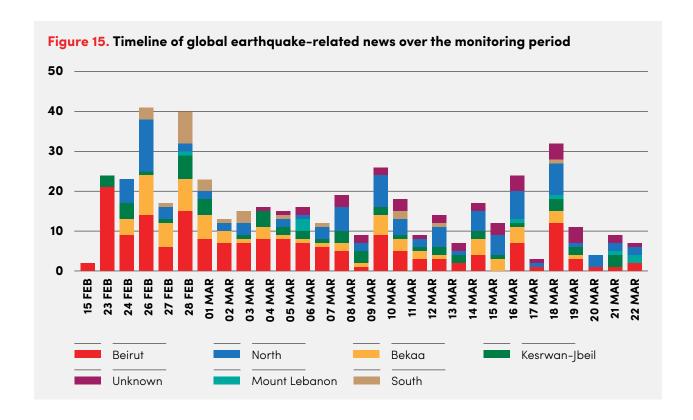
Examples of earthquake-related news:

- Shocking expectations of Michel Hayek: tremors, earthquakes, and aliens! 961Times [420]
- 🔳 Earthquakes will hit these countries and the dollar will exceed this price. أخباركُن مواطن
- طابرینا نیوز 4, أخبار کُن مواطن . Laila Abdellatif surprises the audience with new predictions (video
- This is how the Dutch scientist commented on the possibility of an earthquake in Lebanon. -Enooma – 9
- The fourth prediction of the Dutch scientist comes true with a new earthquake in Russia... What awaits humans?" Achrafiehnews 26
- Planet Venus and a piece from an Egyptian astronomer... Terrifying predictions from the Dutch seismic scientist. أخبار بیروت والعالم

- The Dutch scientist hints at a new earthquake and this is what he published.

 313 موقع صدى الضاحية
- An Arab astronomer predicted a Turkish earthquake. JADIDOUNA NEWS -2
- Major earthquake coming during March, scary tweet by the "Dutch expert." Tripoli L.B.N
- 3. During the monitoring period in the month that followed the Turkish earthquake, the WhatsApp ecosystem in Lebanon remained highly active in reporting on earthquakes on a daily basis. Whether the news was related to an earthquake in Lebanon or in the Philippines, the unfolding disaster in Turkey, or predictions by psychics and astrologists, the coverage of these events consistently evoked feelings of fear, uncertainty, and anxiety among the recipients of such news items.





III.2 NARRATIVE ANALYSIS

A. Misinformation and Hate

Misinformation was particularly prevalent in reports about the earthquake. Unverified predictions
from psychics and astrologists were heavily relied upon, contributing to the dissemination of
inaccurate information. Moreover, the reporting of unusual and mysterious events surrounding
the earthquake added a sense of superstition and fostered feelings of uncertainty and anxiety
among the public.

Examples of earthquake-related and natural disasters misinformation:

- Sometimes ignorance is a bliss. Many people captured the scene of the moon, Venus, and Jupiter aligning. The view is, of course, very beautiful, subhanallah, but it is the cause of the current disasters and earthquakes. 4 عابرينا نيوا
- هوقع صدى الظاحية Space is crowded... and astronomers are worried. 313
- The Dutch scientist warns: Be prepared! نبأ على مدار الساعة
- An asteroid poses a danger to Earth... It may collide with it by the end of this year. اَخْبَارِ کُن مواطن
- In Pictures... Insects attack cars in an Arab country causing deadly accidents! To read the details, click here. News of Beirut and the World. أخبَــاراليــوم

- ا News of an unusual invasion of rats at Manchester Airport in England... 4 طابرينا نيوز
- هوقع صدى الضاحية 313 An unusual situation... The sky is raining worms!
- 2. Across all themes, news items lacking proper context or verifiable sources were prevalent, and in this report, they are categorized as misinformation due to the difficulty in confirming their credibility. These items often included speculative claims regarding exchange rates, potential threats, and security incidents, and commonly cited vague sources such as "a banking source," "information about," "a prominent figure said," or "an economic expert said."

Examples of vague sources:

- An extremely important request
- Activists of a certain group are asked not to engage in responses to certain accusations regarding an incident that shook the country from north to south.
- Urgent banking sources: The dollar may exceed one hundred thousand pounds before the end of next week in case the banks insist on continuing the strike.
- Information was reported
- It is known
- It is said
- An informed source says
- An informed political source says
- A prominent political source emphasizes
- Close parliamentary circles confirm
- A political source who has experienced Lebanese politics asserts
- According to information from a veteran political figure
- Arab diplomatic circles
- A seasoned politician says
- A prominent economic expert asserts
- An opposition political figure indicates
- A veteran politician says
- 3. Disinformation was occasionally shared during sensitive periods, leading to increased tension among the public. An example of this was the case of Sheikh Al-Rifai, where Sabrina News reported that the Sheikh was in hiding due to multiple arrest warrants for fraud. This information was disseminated alongside a parallel campaign accusing Hezbollah of kidnapping the Sheikh, resulting in heightened confusion and suspicion.
- 4. On the international level, Abnaa Beirut Al Ikhbariya published a Russian-made fake video claiming that Ukrainian soldiers were burning the Quran. This video was later confirmed to be disinformation.

5. It was observed that 100% of the news related to Syrian refugees carried a negative tone, often inciting hate. This biased portrayal of Syrian refugees contributes to the spread of prejudice and negative sentiments towards them.

Examples of anti-refugee content:

- 48% of the total displaced persons were born in Lebanon! هنالبنان
- How does USAID deal with Syrian displaced persons in Lebanon and ensure they do not return to their country? 1 میادین العقاومة 1
- Statement | Governor of Baalbek-Hermel, Bashir Khodr: The Syrian refugees benefiting from subsidized goods has accelerated the economic collapse in Lebanon. Refugees benefited from the equivalent of 330 million dollars in electricity and from the support of the exchange rate of the Lebanese pound before 2020, in addition to the consumption of Lebanese infrastructure. 1 ميادين المقاومة
- Watch a shocking dialogue between a mayor and a displaced person... "You are getting aid for three women and you have 16 children! 1 ميادين العقاومة 1
- Property rights for Syrian displaced persons in Lebanon... an indirect attempt at settlement! موقع صدى الضاحية 313
- Here with Salam Al-Zaatari The Syrian displaced persons' crisis is weighing on Lebanon... and has the accusation of "racism" become a knee-jerk reaction? هنالبنان
- Restaurant workers... between the skirmishes of the displaced and the greed of the employers! JADIDOUNA NEWS -2
- The earthquake increases the influx of Syrian refugees to Lebanon. Tripoli L.B.N | News
- Farmers in the South raise their voices: No to Syrian competition, reported in "Al-Akhbar".
 4 عابينا نيوز
- Security forces are concerned about the entry of thousands of Syrians into Lebanon after the earthquake that hit northern Syria and Turkey, especially with the poor economic conditions in Syria and the presence of relatives of thousands of Syrian families in Lebanon who move through illegal crossings. 5 أبناء بيروت الإخبارية

B. Fearmongering

Fear-oriented news varies among different governorates, reflecting the predominant concerns of the residents within each region where the mapped WhatsApp groups were located. For instance, in Tripoli, Kesrwan-Jbeil, and Mount Lebanon, there were frequent mentions of fear regarding security instability. Headlines like "Impending divorce... Lebanon under multiple threats," "Is tension returning to the South?" and "Fears of escalation of political tensions and strife in the upcoming days" (961TODAY.com112) highlighted the prevalent unease. News indicating a potential regional war and Hezbollah's activities also contributed to fear in Tripoli-based groups, with headlines such as "Hezbollah and the Axis are preparing for war... and settlements" and "Hezbollah established a war room," and "Hezbollah: Frangieh... or escalation." (الخبار لبنان)

Livelihood-related news, which affects the daily lives of people, remained the top fear-inducing theme in Beirut, Mount Lebanon, Bekaa, and the South.

"Terrifying predictions about the dollar price in Lebanon: Daily leaps reaching 15,000 until it reaches one million LBP." 961Times [420]

"A bleak picture of the Lebanese situation, economic chaos continues." JADIDOUNA NEWS -2

Additionally, fear incited by political figures was detected in the South, along with news related to then-governor of the Central Bank Riad Salameh. "There's a serious discussion among banks to declare bankruptcy. This means a major collapse." العجلة الإخبارية

"Assassination of Riad Salameh?!... Sami Kleib reveals shocking information and security shocks." 8Lebanese Citizens News

"Riad Salameh hid a flash memory that could blow up Lebanon... information that will come as a "thunderbolt!". 8Lebanese Citizens News

"There's a serious discussion among banks to declare bankruptcy. This means a major collapse." Arab Independent News 1

The earthquake theme was consistently present as a major topic across all governorates, indicating the widespread fear and concern associated with seismic activities. In parallel, news related to banks had a significant presence in Beirut, Kesrwan-Jbeil, and the Bekaa, reflecting the apprehensions surrounding the banking sector.

Figure 15. Top fear-oriented news per governorate

Governorate	Fear 1	Fear 2	Fear 3	Fear 4
Beirut	Livelihood	Earthquake	Security	Banks
Mount Lebanon	Livelihood	Security	Public commentators	Israeli war
Kesrwan-Jbeil	Security	Livelihood	Earthquake	Banks
Bekaa	Livelihood	Earthquake	Security	Banks
South Lebanon	Livelihood	Earthquake	Riad Salameh	Class A political figures
North Lebanon	Security	Livelihood	Earthquake	Hezbollah

[&]quot;Something worse is awaiting us!" 31 لبنان والعالم

III.3 WHATSAPP GROUP ANALYSIS

A. WhatsApp Group Reach

The 37 groups analyzed in this study had a direct reach of 59,653 users. However, it was observed that 80% of these groups were part of larger WhatsApp networks, with each network consisting of five to 100 groups that publish the same content. This indicates the potential to reach additional individuals. To estimate the extent of this reach, an average number of 53 groups per network was considered (as the average of 5 and 100).

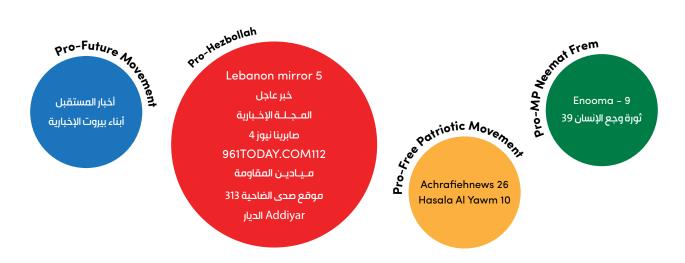
Considering that the average number of participants per group is approximately 1,613, each network has a potential reach of around 85,489 individuals (1,613 participants per group multiplied by 53 groups in the network). Extrapolating this to the 37 original groups, the total potential reach across all networks would eventually amount to 3,163,093 group users.

In the context of Lebanon's adult population, estimated at around 5 million, and with approximately 85% (4,250,000) being WhatsApp users, these WhatsApp groups and networks could potentially reach approximately 3 out of 4 WhatsApp users in Lebanon.

It is important to acknowledge that these numbers are rough estimates, and the actual reach could be lower due to overlaps in membership across groups. Nevertheless, the sharing of content beyond these groups to other users may further increase the reach.

B. WhatsApp Group Political Leanings

In order to assess the political leaning of each group, we have collected information on their news sources, the frequency of coverage of different politicians, the affiliation and number of the public commentators on the groups, and the coverage of sporadic politicized incidents. Here is a breakdown of the groups based on their political leanings.



C. WhatsApp Groups and Journalistic Practices

The majority of the groups analyzed in this study do not possess official registration as a news agency. Consequently, these groups often engage in the dissemination of graphic content and misinformation, which frequently trigger fear among their recipients as a hook to attract a larger audience, with little-to-no respect to basic ethical journalism standards.

Furthermore, our analysis indicates a high tendency among WhatsApp groups to replicate each other's content by making slight alterations such as modifying punctuation, rearranging the word order, or merging multiple news items into a single message. When assessing the originality of the content shared by each group, we found that no group shared more than 63% of entirely original news.

It has come to our attention that three groups within the analyzed WhatsApp ecosystem are engaged in impersonating prominent news outlets such as Annahar, Addiyar, and BBC Arabic. Of particular note is the Khabar Ajel- غبر عاجل community, which frequently publishes pro-Hezbollah content and relies on the Hezbollah-affiliated Al-Manar TV as a primary source. This group also promotes a rather unknown political figure, named Ibrahim Al Majzoub, as a potential prime ministerial candidate, indicating a political marketing operation.

These findings highlight the need for caution when consuming news from WhatsApp groups, as the lack of official registration, impersonation of existing outlets, and the prevalence of copied content should serve as warnings about the credibility and accuracy of the information being shared.

D. WhatsApp Groups and Marketing Practices

Most WhatsApp groups are part of a larger chain of groups, spanning across various governorates, which allows for extensive reach and coverage.

In order to understand the impact and reach of information disseminated through selected WhatsApp groups in Lebanon, an unobtrusive measurement was employed by posting an advertisement linking to the researcher's website. This method was used to gauge the click-through rate from the WhatsApp groups, and was conducted in compliance with ethical standards, ensuring the anonymity and privacy of group members, while refraining from any deceptive or harmful practices.

WhatsApp groups offer a cost-effective way to reach the public, especially when compared to other media and advertising platforms. For example, advertisement on these WhatsApp groups provide the capability to reach up to 40,000 people for as little as \$5. In comparison, a \$800 marketing plan on Facebook over one month typically leads to 30 conversions per day (i.e., when a user performs a desired action in response to a call-to-action), resulting in a conversion rate at \$0.8 per click. On the other hand, a \$5 advertisement on a large WhatsApp group generates approximately

130 conversions, resulting in significantly lower conversion cost, as low as \$0.038 per click. With a budget of \$3,000, it is possible to spread 10 news messages per day, including photos and links, across two different community groups, reaching approximately 80,000 people. The cost per click on WhatsApp is significantly lower, and the platform provides a higher potential for viral sharing, as observed in the data.

It is important to note that alongside the use of WhatsApp as an advertising platform for news content, there are also concerns related to the sale of foreign phone SIM cards and fake social media accounts (to multiply the number of "likes" or subscribers) within certain WhatsApp groups. Content may also contain malicious web links. These activities may facilitate the circumvention of local phone ownership regulations and pose security threats to users. Clicking on such links can result in privacy breaches, malware infections, or other harmful consequences.

Given these observations, it is crucial for users to exercise vigilance and critical thinking while engaging with content within WhatsApp groups. Verifying the authenticity of news sources, refraining from engaging in illegal activities, and exercising caution when interacting with web links are essential steps to ensure a safe and reliable experience within the platform.

IV. CONCLUSION

- 1. Expansive reach and influence of WhatsApp groups: The study findings indicate that WhatsApp groups have a remarkably wide reach, potentially connecting with three quarters of WhatsApp users in Lebanon. These groups are part of larger networks, which enhances the dissemination of content. Moreover, their cost-effectiveness for advertising, compared to platforms like Facebook, makes them a formidable tool for targeted information dissemination.
- 2. Dominant themes and regional variation in conversations: The analysis revealed that conversations in the 37 sampled groups revolved mainly around key themes such as livelihood, security, politics, and foreign countries' involvement in Lebanon. Interestingly, there were regional variations in the content promoted and more specifically in fear-oriented news, reflecting the different concerns prevalent in various areas.
- **3. Sensationalism, speculation, and fearmongering**: WhatsApp groups frequently employ sensationalized language, unverified speculations, and a focus on dramatic events. These practices contribute to an atmosphere of anxiety and uncertainty among the public, potentially influencing behaviors, including purchasing trends and political opinion-shaping.
- **4. Mis- and disinformation**: The study highlighted the pervasive spread of false or misleading information, particularly during sensitive periods, where it can be used to exploit or manipulate public sentiment. Notable examples include unreliable earthquake predictions and the case of Sheikh Al Rifai's murder.
- 5. Security concerns and representation: Security emerged as a recurring theme in the news shared on the groups, encompassing discussions about violence, crime, and social unrest. However, there was a tendency to portray regions like Tripoli and communities such as Syrian refugees in a negative light, perpetuating stereotypes and xenophobia.
- 6. Political alignment of WhatsApp groups: Various groups exhibited discernible political leanings, aligning themselves with parties such as Hezbollah, the Future Movement, and the Free Patriotic Movement. These affiliations were evident from the news sources used, the coverage of certain politicians, and the presence of public commentators within the groups.

- **7.** Lack of accountability and ethical considerations: Many WhatsApp groups lack official registration as news agencies, and there is a prevalent trend of sharing sensitive content, such as graphic images, without consent or proper warning. These practices raise concerns regarding ethical standards and accountability for the information shared.
- 8. Impersonation, security risks and credibility concerns: The study identified instances of WhatsApp groups impersonating prominent news outlets, which can mislead users. Additionally, the promotion of foreign SIM cards, fake social media accounts, and potentially malicious web links poses security risks. Combined with the prevalence of mis- and disinformation and the lack of accountability, these issues raise significant concerns about the credibility of information disseminated through these groups.
- **9.** The need for responsible information sharing and regulation: The study underscores the dual nature of WhatsApp news groups in Lebanon. While they serve as powerful tools for information dissemination and advertising due to their extensive reach and cost-effectiveness, the propagation of sensationalism, mis- and disinformation, and ethically questionable content highlights the importance of responsible information sharing practices and considerations for creative models of regulation to safeguard the public interest while preserving the freedom of expression and information.

