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The High Atlas Earthquake: Disaster, crisis, and government response

Preliminary Results

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March 2024

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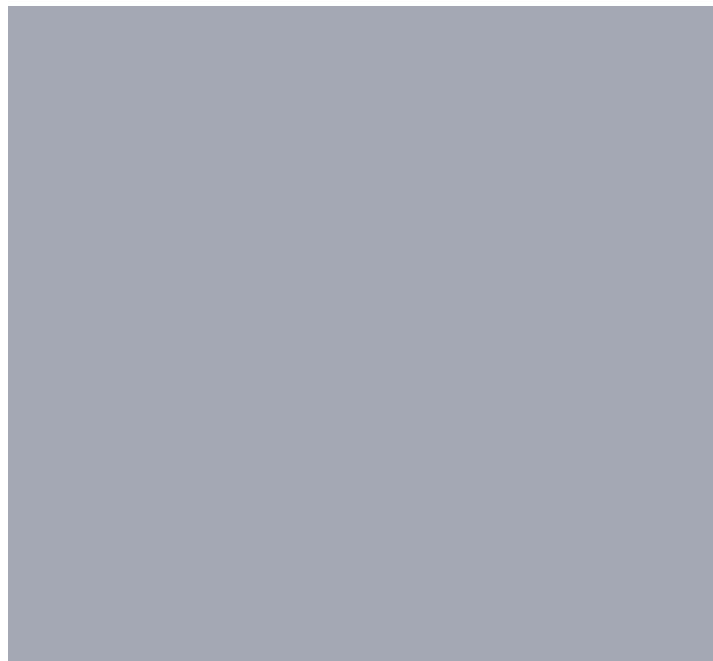
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INTRODUCTION

Context

Natural disasters could be some of the biggest challenges faced by governments around the world. The Al Haouz earthquake of September 8th is the last of a series of shocks that have struck Morocco since the COVID-19 pandemic, posing urgent questions about the Moroccan government's ability to tackle the situation and rescue the victims. The epicenter of this 6.4 magnitude earthquake was located 70 km southeast of Marrakech, with human and material losses concentrated in the provinces of Al-Haouz, Taroudant, and Chichaoua, and to a lesser extent in Marrakech, Ouarzazate and Azilal. The National authorities reported that 2,946 people lost their lives and 6,125 individuals were injured in the wake of this natural disaster. The government estimates that close to 60 thousand buildings have been totally or partially destroyed, mostly in remote and impoverished mountainous villages, affecting at least 300,000 people (Source: Interior Ministry). The Royal Court announced a three day period of national mourning while immediately establishing a ministerial committee to develop a program for the rehabilitation and reconstruction of damaged homes. This natural crisis also exacerbated pre-existing patterns of vulnerability, and has raised awareness about the pockets of poverty¹ that persist in rural areas, many of which have barely participated in the profound economic transformations undergone elsewhere in Morocco over the past two decades.

Following the news of the tragedy in Morocco, offers of assistance also poured in from around the world, while only responding to offers of support from friendly countries: Spain, Qatar, the United Kingdom, and the United Arab Emirates.

¹ According to HCP 2014 poverty map database, the closer to the epicenter, the higher the incidence of both multidimensional and monetary poverty, well above regional and national averages. Education metrics, including the illiteracy rate, often worsen in proximity to the earthquake's epicenter.

In the wake of the devastating earthquake, an outpouring of solidarity and social mobilization has taken place in the country at a grassroots level. Moroccans from various walks of life, including civil society activists, human rights advocates, and community members, have come together to support the earthquake-affected areas, particularly those in remote mountainous regions, with the provision of food, water, medicine, clothing, and temporary housing. In cities like Rabat, Casablanca, Tangier, Layoune, tens of thousands of Moroccans answered the authorities' calls to address the urgent need for blood donations. Significant philanthropic steps also emerged in response to the earthquake.

The government also undertook immediately an impact assessment of damage and launched ambitious reforms. Under royal instructions, the Moroccan parliament's Finance and Economic Development Committees established a dedicated treasury account to collect contributions and donations for earthquake relief, aligning with the legal framework for such accounts outlined in the Moroccan constitution and Finance Law. In addition to these official efforts, numerous NGOs and organizations have launched campaigns to collect funds and assistance. Subsequently, the government has unveiled a new vision for the region, merging prompt financial aid for affected households with an ambitious developmental strategy for the high Atlas provinces. The commission launched recovery efforts met with monthly payment of 2,500 Moroccan dirhams (\$242) for a one-year period to the families that have been affected by the earthquake starting Oct. 6, 2023. The payments are among several forms of relief that Morocco plans to provide residents displaced by the earthquake. It will provide temporary rehousing assistance and up to 140,000 dirhams (\$13,600) to rebuild destroyed homes (60 thousand buildings destroyed, including more than 500 schools located for the most part in the rural provinces of Al Haouz, Chichoua and Taroudant). It also plans to rebuild about 1,000 schools and 42 health centers.

Perceiving the Disaster

As disasters potentially affect all of us, it is important to better understand their general social and political effects. Disasters can directly impact individuals, leading to damage to their property or posing a threat to their lives and the lives of those close to them. Furthermore, these events have the potential to influence citizens on a deeper level, shaping their perceptions and thoughts. For instance, such crises may have an impact on how citizens think about their neighbors who assisted them during the earthquake. A disaster may also change the way citizens feel about other people in general, e.g., after experiencing that the general public made donations to assist affected individuals. Additionally, a disaster may also affect public opinion about the government, e.g., because citizens feel the government handled the disaster particularly well, or not well at all². In that respect, these social and political effects can arise not only from firsthand experiences but also from indirect exposure to the events, such as through media coverage. Ultimately, in the event of a disaster, individuals turn to various media channels such as television, radio, and online platforms through their phones and computers to gather information and keep themselves updated.

Do social trust, political trust, and government satisfaction therefore generally change following natural disasters? How news has been reported through traditional and new types of media, such as news reporting online and social media? The overall aim of the study is to examine to what extent the Al-Haouz earthquake disaster generally affected social capital and satisfaction with the government among individuals and to explore media coverage as the presumed mechanism underlying information sharing. First, social capital and attitudes towards the government have been recognized by inter-

² Albrecht, F. 2017. *The Social and Political Impact of Natural Disasters: Investigating Attitudes and Media Coverage in the Wake of Disasters*. Appala University.

disciplinary disaster research as important in relation to disasters, but not always conceptualized thoroughly. Second, these concepts form cornerstones in relation to political culture, democratic governance, and collective action (Putnam, 2000³; Ostrom & Ahn 2008⁴).

This study is divided into two sections. The first section deals with how people perceive the government responses to the seismic event. This included evaluating the speed and coordination of emergency response efforts, the deployment of resources for rescue and relief operations, and the overall efficacy of crisis management strategies. It also aims to identify the correlation between the effectiveness of government management during the disaster and the resulting impact on social attitudes. This section also examines how the government's actions and communication strategies during the crisis may contribute to or diminish public trust and satisfaction.

The second section is concerned with an investigation of the level of communication during the Al-Haouz earthquake crisis and aims to investigate the impact of the disaster on social trust, and government satisfaction by examining the dynamics of information dissemination. This includes an exploration of how traditional and new media outlets, such as online news reporting and social media, contribute to shaping public perceptions and responses.

3 Putnam, R.D., 2000. *Bowling alone : the collapse and revival of American community*, New York: Simon & Schuster.

4 Ostrom, E. & Ahn, T.K., 2008. The meaning of social capital and its link to collective action. In J. W. van Deth & G. Wolleb, eds. *Handbook on social capital*. Northampton, MA: Edward Elgar Pub, pp. 17–35

RESEARCH DESIGN

This section outlines the methodology and describes the research design adopted in this study. The findings in this report are based on quantitative data analysis based on a representative sample of 2000 people. The data was collected between October-December, 2023. To ensure the sample's representativeness, a stratified random sampling approach was employed, using the variable "gender" as a predefined quota to achieve an equitable distribution of females and males in the sample. Data collection was conducted via CATI (Computer Assisted Telephone Interviews). Telephone surveys are structured interviews conducted by an interviewer who records the answers to mostly closed-ended questions. CATI enables interviewers to enter responses immediately into databases that commence aggregation and analysis of the entered data. In addition to this advantage, telephone interviews are relatively inexpensive to administer (unless calling long distance) and of short duration, compared to the time taken by respondents to complete written questionnaires. The research data is then registered, coded, and verified for errors, data gaps and inconsistencies. The clean data is then weighted by gender, age, nationality, and region.

The questionnaire comprises 27 questions. In accordance with the demographic structure of the Moroccan population as outlined by the Higher Planning Commission (HCP 2014), the sample is representative of the Moroccan population aged 18 and above. The quantitative data was analyzed using the Statistical Package for Social Science (SPSS), and the findings were displayed in the form of tables and graphs. The frequencies, percentages, and other inferential or descriptive statistics collected were used to interpret the data.

Respondents Profiles

The sample comprises an equal gender distribution, with 46% of the sample being female (see figure 1). The Age distribution. Among the respondents, 85% indicated the Moroccan dialect as their primary language, suggesting a substantial affinity for this linguistic variant in daily communication (see figure 3). Amazigh and French were also prevalent choices, with 13% and 1% of respondents, respectively, selecting these languages (see figure 3). This distribution sheds light on the diverse linguistic landscape within the study group. Regarding regional distribution, 20% of respondents live in the Casablanca region, followed by the region of Marrakesh Safi with 15%, Rabat-Sale-Kenitra 14%, and Souss Massa 9%. While only 3% of the respondents live in the southern regions (Guelmim Oued Noun-Laayoune Sakia Lhemra- Dekhla) (see figure 4). The urban population comprises 63% versus 32% of rural respondents (see figure 5). The persons with income less than 3000 MAD constitute about 43% of the respondents; those whose income ranges between 3000 and 8000 MAD per month account for 30%; while those whose income is between 8000 and 15000 account for 6%. (see figure 6). As per their education level, 15% were uneducated, 22% had a primary level, about 36% of the respondents have a middle-school or high school level, and 10% had a university-level education (1st or 2nd year) (see figure 7). In the survey, participants were queried about their employment status, revealing a diverse representation within the sample. The responses indicated that 32% of the respondents are currently employed; 19% identified as self-employed; 16% reported being unemployed. A smaller but notable group, comprising 3%, indicated retirement status (see figure 8). The survey unveiled a predominant presence in the private sector, with 78% of respondents indicating employment in private industry. In contrast, 22% reported working in the public sector (see figure 9).

Figure 1 : Gender Distribution

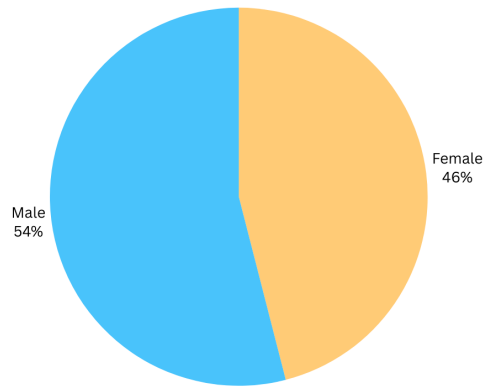


Figure 2: Age Distribution (couldn't find it in the sheets)

Figure 3 : Linguistic Variation

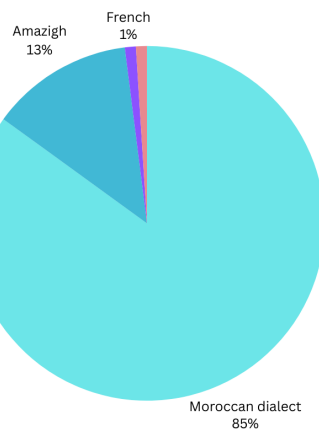


Figure 4: Regional Distribution

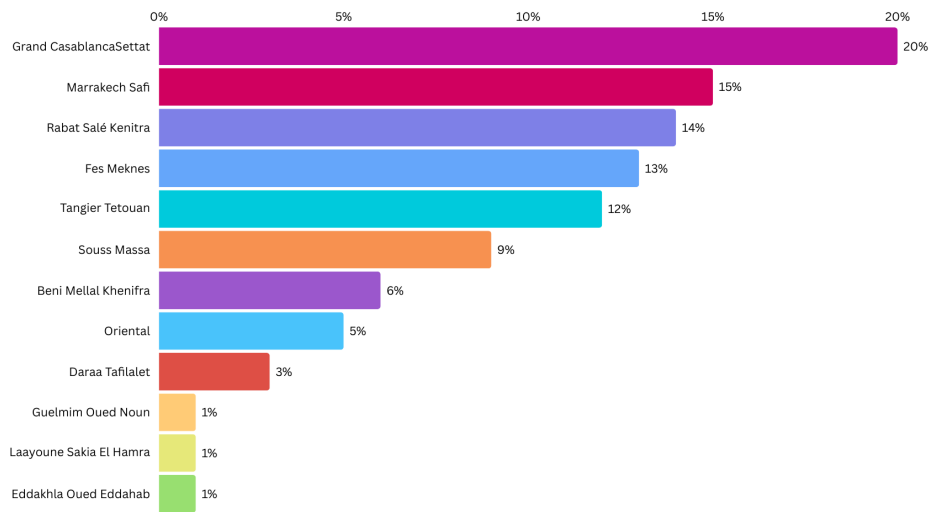


Figure 5: Rural vs Urban

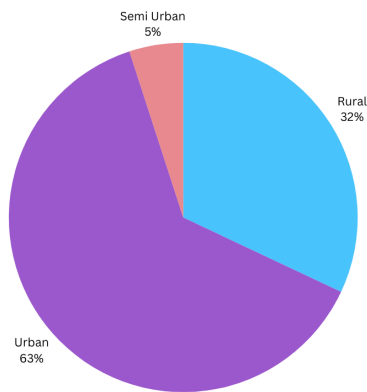


Figure 6: Income Distribution

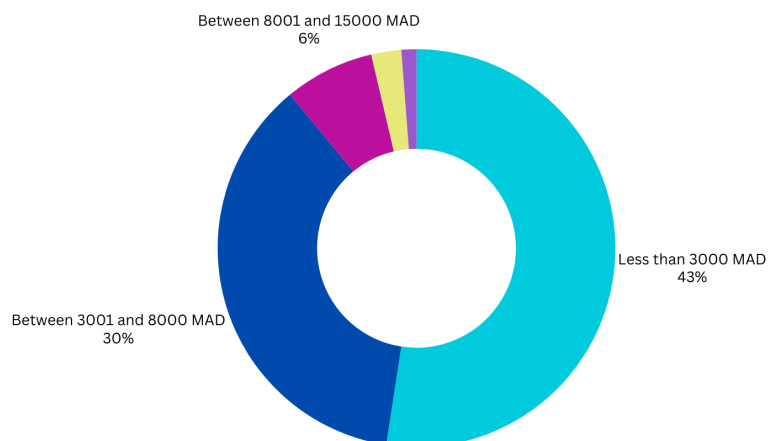


Figure 7: Education Level

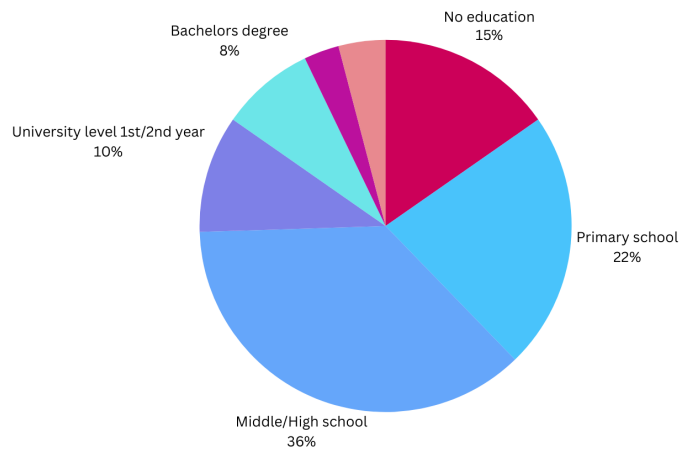


Figure 8: Employment Status

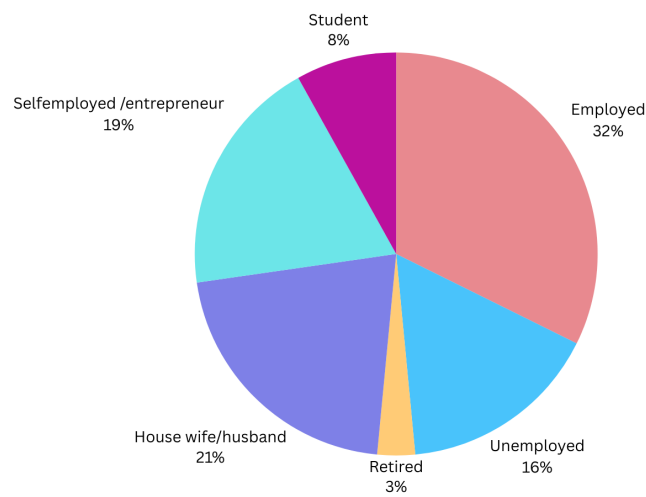
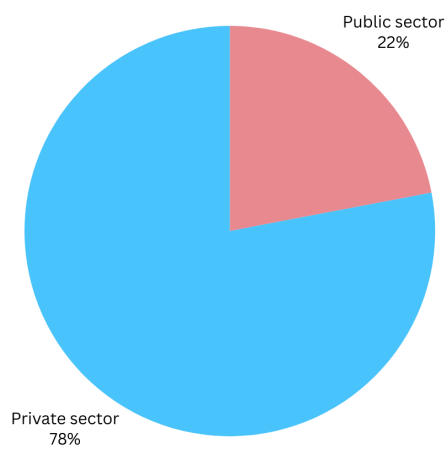


Figure 9: Private vs Public Sectors



KEY RESULTS

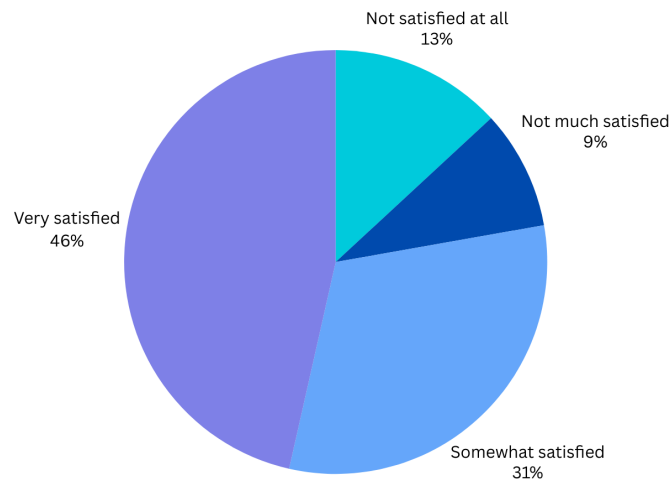
The Effectiveness of Government Management

The centrality of the government's effectiveness in managing crises is clear in explaining citizens' perceptions about the government in general. Establishing trust between governments and their citizens is essential for the smooth functioning of contemporary society (Robinson et al., 2020)⁵. It is evident that effective crisis management should prioritize risk reduction and cost minimization for society. We propose that citizens' assessments of the government's handling of crises play a pivotal role in fostering trust between stakeholders. This trust, in turn, encourages individuals to willingly support and engage with government initiatives aimed at addressing the challenges posed by such crises (Ibid).

The findings reveal a nuanced perspective on the satisfaction levels regarding the government's handling of the earthquake crisis. A majority, comprising 77% of respondents, expressed satisfaction, with 46% indicating they were "Very satisfied" and an additional 31% reporting being "Satisfied somehow." This substantial level of approval underscores some effectiveness in the government's crisis management efforts. However, it is imperative to address the concerns raised by the remaining 22% of respondents. Among them, 9% expressed being "Not satisfied somehow," while 13% reported being "Not satisfied at all." These dissenting voices highlight areas of potential improvement in the government's response to crises. Understanding the reasons behind this dissatisfaction is crucial for policymakers to refine their strategies and enhance overall satisfaction levels in future crisis management endeavors. (see figure 10)

5 Robinson, Scott E., Joseph T. Ripberger, Kuhika Gupta, Jennifer A. Ross, Andrew S. Fox, Hank C. Jenkins-Smith, and Carol L. Silva. 2020. The Relevance and Operations of Political Trust in the COVID-19 Pandemic. *Public Administration Review*. <https://doi.org/10.1111/puar.13333>.

Figure 10: Satisfaction with Government’s Management of Earthquake Crisis



Cross-tabulating by gender, 45% of males were “Very satisfied,” while 17% were “Not satisfied at all.” Conversely, 47% of females were “Very satisfied,” and 9% were “Not satisfied at all.” (see figure 11). Similarly, the satisfaction levels regarding the government’s earthquake crisis management vary across different regions. In the Rabat-Sale-Kenitra region, 54% expressed being “Very satisfied,” while 15% were “Not satisfied at all.” In Marrakesh-Safi, 42% were “Very satisfied,” with 16% “Not satisfied at all.” The Grand Casablanca-Settat region saw 48% “Very satisfied” and 11% “Not satisfied at all.” Meanwhile, in the Tanger-Tetouan-Al Hoceima region, 35% were “Very satisfied,” and 16% were “Not satisfied at all.”(see figure 12)

Figure 11: Satisfaction with Government’s Management of Earthquake Crisis/ Gender Pattern

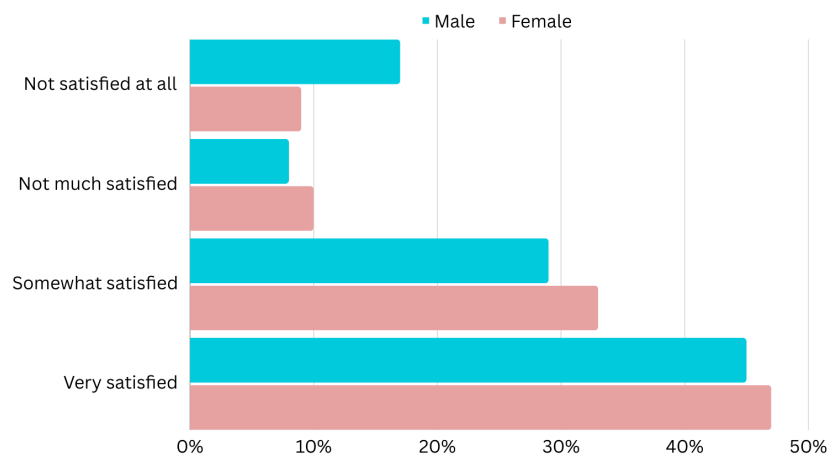
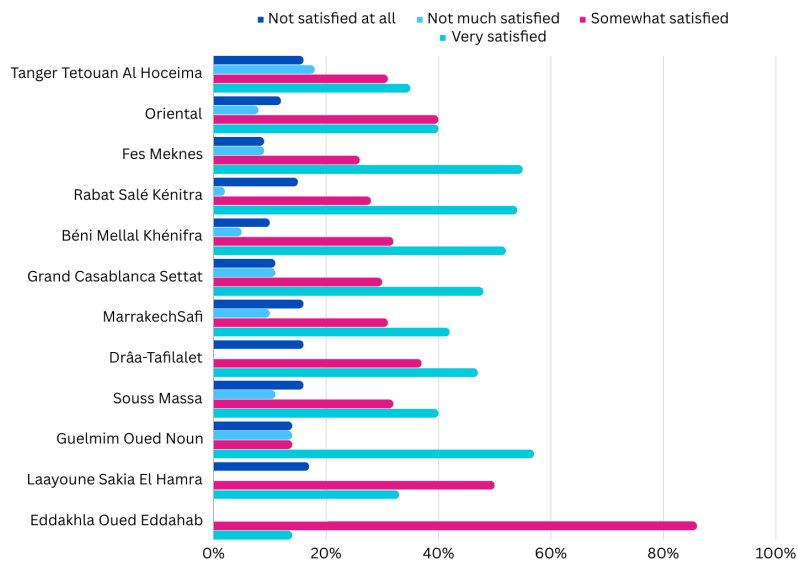
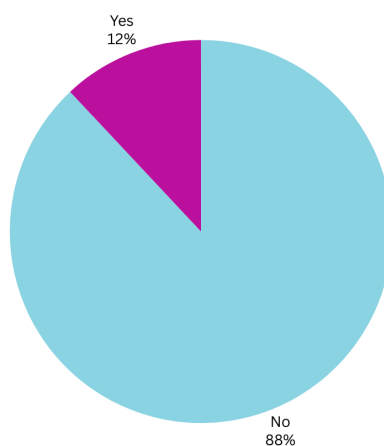


Figure 12: Satisfaction with Government’s Management of Earthquake Crisis/ Region



The survey sought to determine the direct impact of the earthquake on respondents and whether they received support and assistance from the government and Civil Society Organizations (CSOs) or philanthropists. The findings reveal that 12% of respondents reported being directly affected by the earthquake, while the majority, comprising 88% of respondents, indicated they were not directly impacted (see figure 13).

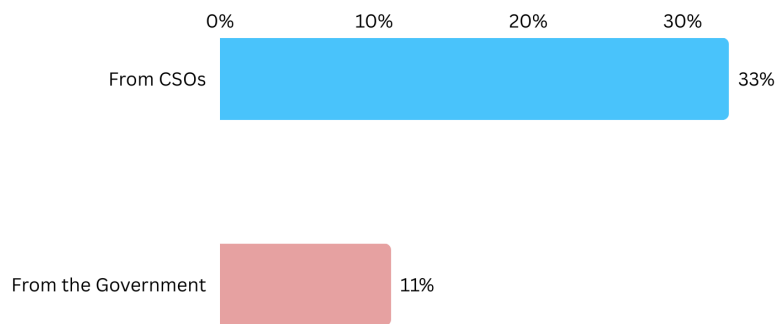
Figure 13: Direct Impact of the Earthquake on Survey Respondents



Of those directly affected by the earthquake, only 11% reported receiving support and assistance from the government, 33% repor-

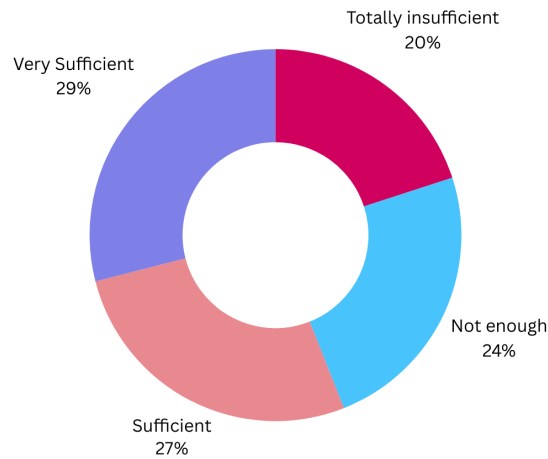
ted receiving support and assistance from CSOs and philanthropists, indicating a higher proportion compared to government assistance (see figure 14).

Figure 14: Receipt of Support and Assistance from Government and Civil Society Organizations



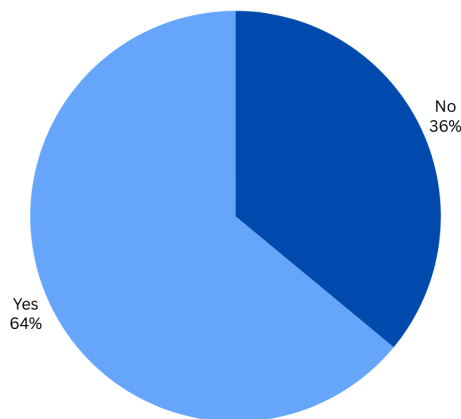
The survey aimed to gauge respondents' perceptions regarding the sufficiency of support and assistance provided by the government in the aftermath of the earthquake. The findings reveal diverse opinions among participants regarding the adequacy of government aid. Approximately 56% of respondents expressed varying degrees of satisfaction with the support provided by the government. Conversely, a notable 44% of respondents felt that the government's support was insufficient (see figure 15). Factors contributing to these differing viewpoints could include variations in the distribution of aid, disparities in access to assistance, or the magnitude of the earthquake's impact on individual circumstances.

Figure 15: Perception of Government Support Sufficiency



The statistics reveal varying levels of engagement and support from respondents towards earthquake victims. The data presents a nuanced examination of individuals' contributions towards supporting earthquake victims, offering insights into the efficacy and distribution of aid efforts. While a notable portion (64%) of respondents reported contributing efforts to assist victims, further analysis reveals a complex landscape of engagement (see figure 16).

Figure 16: Contribution Efforts to Support Earthquake Victims



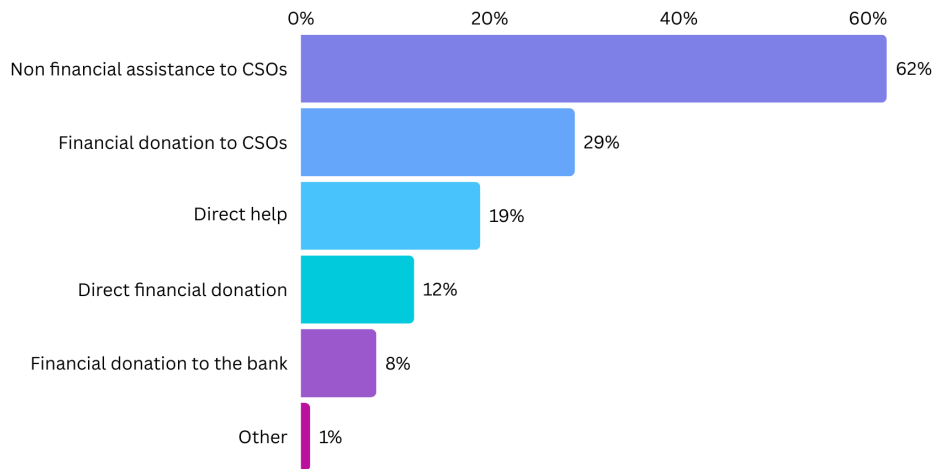
Notably, a significant percentage (36%) did not directly offer their time and effort, indicating potential gaps in community involvement or awareness regarding opportunities for direct assistance. This suggests a need for targeted outreach and education initiatives to enhance community participation in disaster response efforts.

Additionally, the low percentage (12%) of respondents making financial donations directly to victims raises questions about the effectiveness of individual-level monetary contributions in addressing the immediate needs of those affected. Conversely, a relatively higher proportion (29%) opted to donate to Civil Society Organizations, indicating a perceived trust in these entities' capacity to deliver aid effectively. However, the discrepancy between financial donations to Civil Society Organizations and direct aid to victims warrants further examination to ascertain whether resources are being optimally allocated to meet the most pressing needs.

Furthermore, the prevalence of non-financial assistance (62%) provided to Civil Society Organizations underscores the importance of diverse forms of support beyond monetary contributions. However, the limited uptake (8%) of donations to the official bank account designated for managing earthquake consequences suggests potential concerns regarding the transparency and efficacy of centralized relief efforts. This underscores the importance of robust communication and accountability mechanisms to instill confidence among donors and ensure effective resource utilization. (see figure 17)

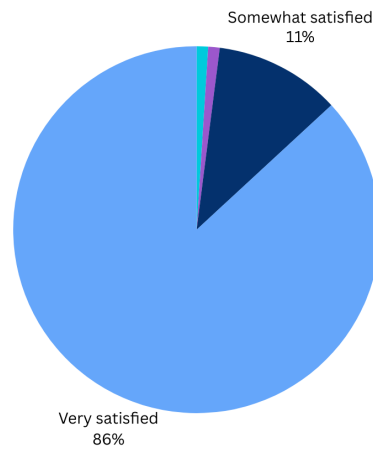
Overall, while the data reflects commendable levels of community engagement in supporting earthquake victims, critical gaps and disparities in aid distribution and effectiveness highlight the need for targeted interventions and improved coordination among stakeholders to optimize relief efforts and address the evolving needs of affected communities.

Figure 17: Forms of Support



The high satisfaction levels (97%) expressed by respondents regarding the contribution of Civil Society Organizations (CSOs) and associations during rescue operations and in aiding victims are noteworthy and align with the broader themes observed in the previous analysis. These results reflect a strong vote of confidence in the effectiveness and responsiveness of CSOs in disaster response efforts (see figure 18). The demonstrated satisfaction levels underscore the critical need for fostering strong partnerships among governmental bodies, civil society organizations (CSOs), and other relevant stakeholders in disaster management. The positive reception of CSOs' contributions highlights their indispensable role as primary actors in disaster response and recovery efforts.

Figure 18: Satisfaction with Contributions of Civil Society Organizations and Associations during Rescue Operations and Aid Efforts

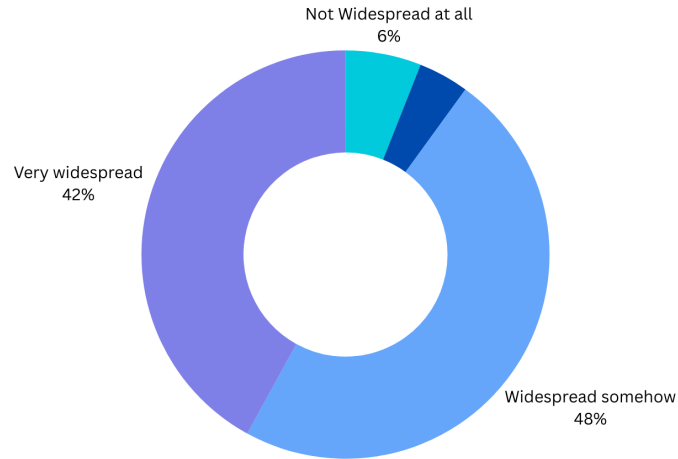


The responses reflect a concerning perception of misconduct and challenges in aid distribution during the earthquake crisis. For instance, theft and manipulation of aid are perceived as very widespread or widespread by a combined 90% of respondents, indicating significant issues with accountability and integrity in aid management. Similarly, the high proportions of respondents perceiving the monopolization of aid distribution (76% in total) and the spread of fake news (85% in total) as widespread or very widespread highlight the erosion of trust and transparency in relief efforts. Furthermore, a significant 76% of respondents perceive the monopolization of aid distribution as either widespread or very widespread, while an overwhelming 85% hold a similar perception regarding the spread of fake news. Additionally, notable proportions of respondents express concerns over issues such as sexual harassment and exploitation (67%), disregard for cultural and privacy rights (70%), exploitation for propaganda purposes (83%), and manipulation by traders (76%) during the crisis. These findings highlight the critical need for robust governance mechanisms, transparency, and ethical standards to address systemic weaknesses and ensure equitable and accountable aid distribution. Efforts to strengthen oversight, reinforce integrity measures, and prioritize the dignity and well-being of affected

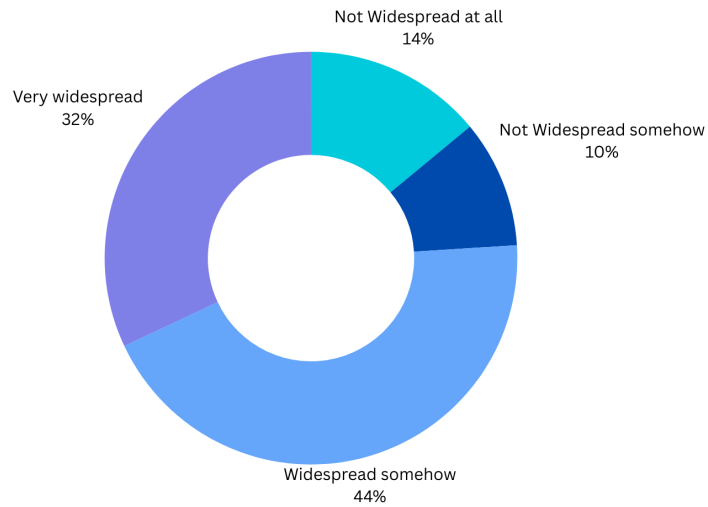
populations are imperative to uphold the principles of humanitarian assistance and rebuild trust in relief operations. (see figure 19)

Figure 19: Widespread Practices during the Earthquake Crisis

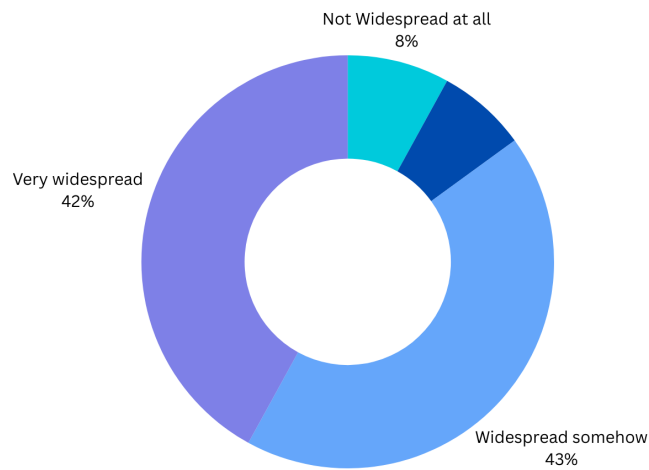
Theft and manipulation of aid directed to earthquake victims



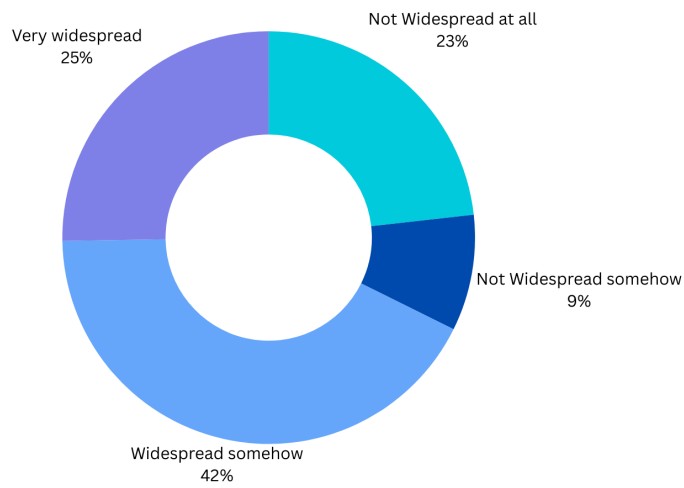
Monopolizing aid by entities responsible for the distribution



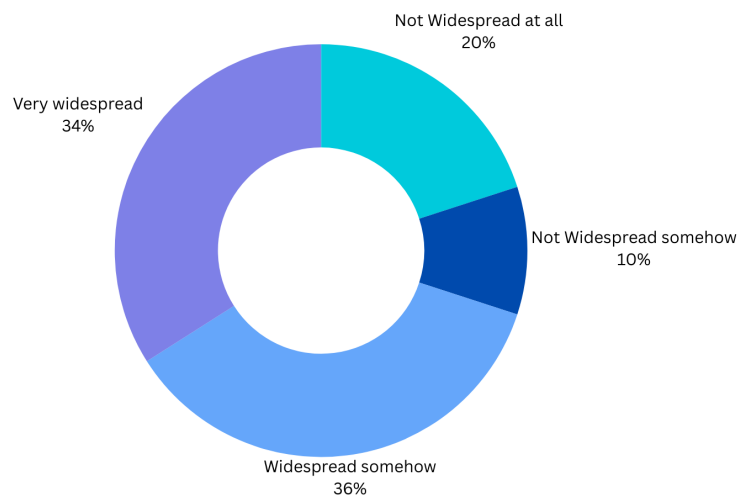
Spread of fake news



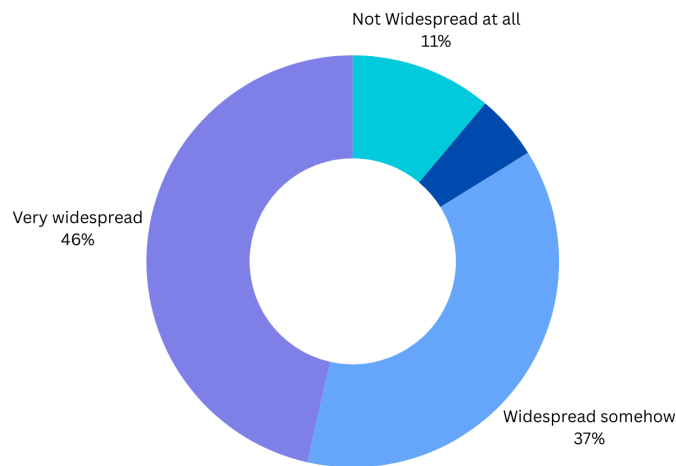
Sexual harassment and exploitation of minor children



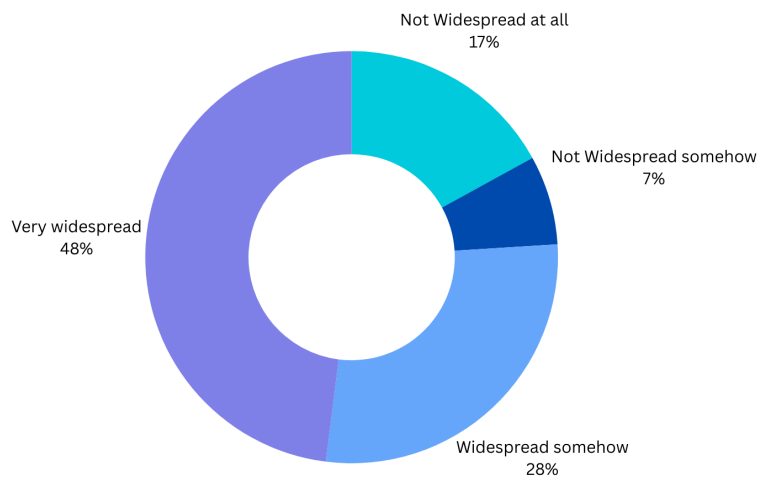
Disregard for cultural and privacy rights of the affected population



The exploitation of some individuals and groups during the earthquake crisis for propaganda



Manipulation and raising prices by some traders

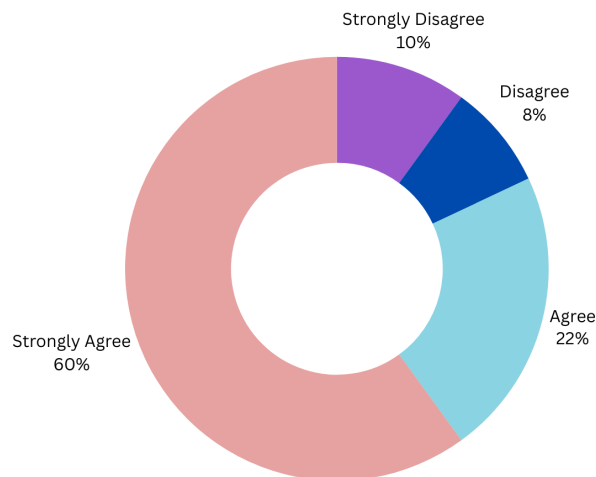


The survey results present a nuanced perspective on various statements regarding the aftermath of the earthquake, shedding light on the sentiments and beliefs prevalent among respondents. Notably, a significant majority of respondents, totaling 82%, either strongly agree or agree that the government has the right to refuse assistance provided by certain countries, such as France. This finding suggests a prevailing sentiment of sovereignty and autonomy in decision-making regarding international aid partnerships. Additionally, an overwhelming majority, comprising 94% of respondents, strongly advocate for the implementation of laws mandating earthquake-resistant building standards, indicating a strong consensus on the importance of proactive measures to enhance structural re-

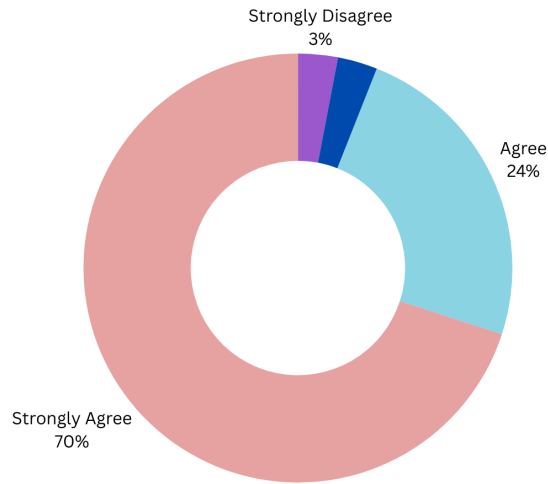
silience and mitigate future risks. Similarly, the resounding support for integrating earthquake response methods into school curricula, with 96% of respondents expressing agreement, underscores the recognition of the critical role of education in fostering preparedness and resilience among future generations. However, a notable divergence of opinion arises concerning the future trajectory of earthquake-affected areas. While a considerable proportion, totaling 92% of respondents, foresee positive developments and increased prosperity, there remains a minority, representing 14% of respondents, who express concern about the potential for increased poverty and underdevelopment in these regions. This discrepancy highlights the complexity of post-disaster recovery and underscores the importance of comprehensive and inclusive strategies to address varied community needs and aspirations effectively. (see figure 20)

Figure 20: Practices in the Aftermath of the Earthquake

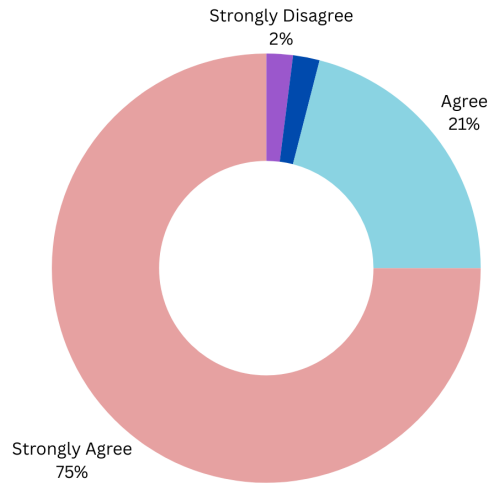
The government has the right to refuse assistance provided by some countries such as France



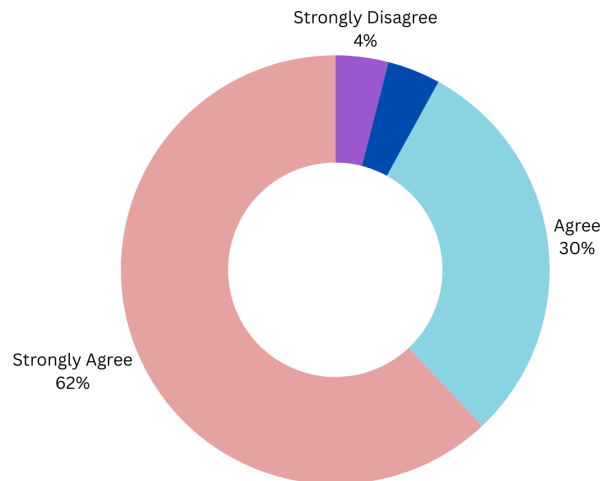
The government should issue a law requiring earthquake resistant building standards



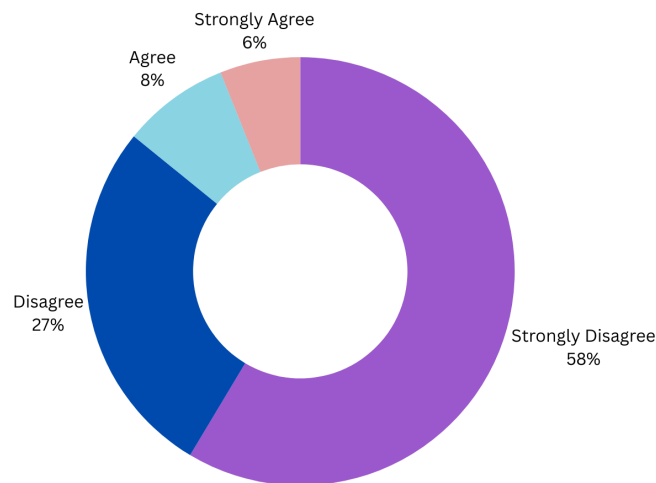
Earthquake response methods should be taught in schools



The future of the earthquake hit areas will be more developed than before

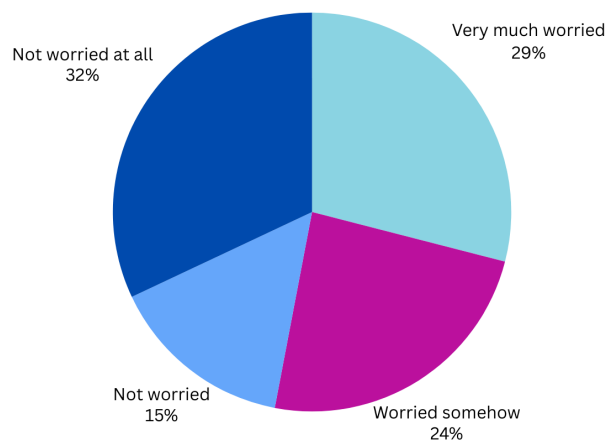


The areas hit by the earthquake will be poorer and more underdeveloped in the future



The survey questioned respondents about their concerns regarding the earthquake’s impact on the Moroccan economy. The results reveal a diverse range of sentiments among participants. A notable 53% of respondents expressed some level of worry, with 29% indicating that they were “Very much worried” and 24% stating they were “Worried somehow”. Conversely, a combined 47% of respondents reported being either “Not worried” (15%) or “Not worried at all” (32%). (see figure 21).

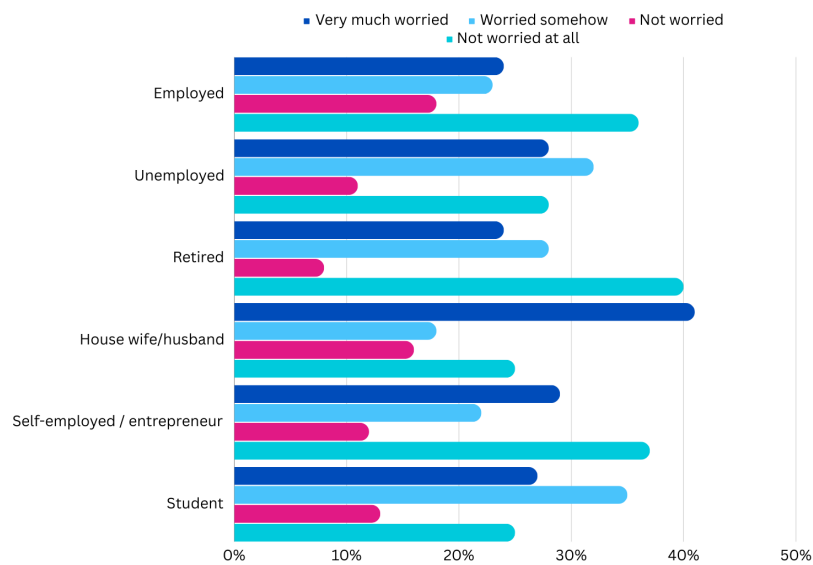
Figure 21: Concerns Regarding the Economic Impact of the Earthquake



Analyzing the data in relation to employment status provides further insights. Among employed individuals, 24% were “Very much worried,” and 23% were “Worried somehow”. Conversely, 18% expressed being “Not worried,” while 36% were “Not worried at all”.

Unemployed respondents showed higher levels of concern, with 28% being “Very much worried” and 32% “Worried somehow”. Additionally, 11% were “Not worried,” and 28% were “Not worried at all”. Self-employed individuals demonstrated similar patterns, with 29% expressing being “Very much worried” and 22% “Worried somehow”. Conversely, 12% reported being “Not worried,” and 37% were “Not worried at all”. (see figure 22)

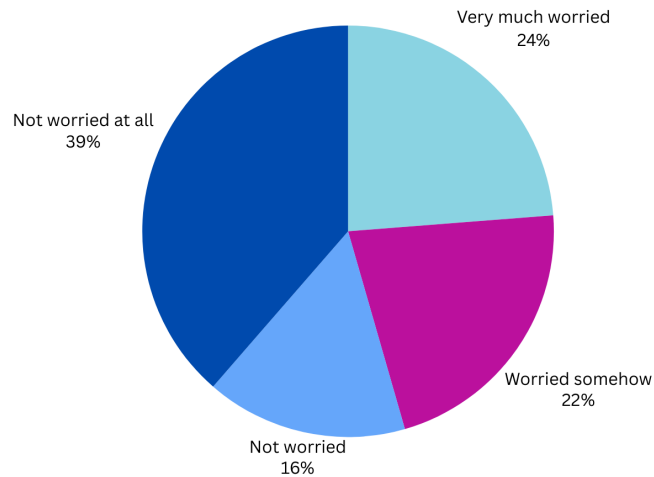
Figure 22: Concerns Regarding the Economic Impact of the Earthquake/ Employment Status



The survey aimed to assess respondents’ apprehensions regarding the earthquake’s potential impact on the tourism industry in Morocco. The results depict a range of sentiments among participants. A combined 46% of respondents expressed some level of worry, with 24% indicating they were “Very much worried” and 22% stating they were “Worried somehow”. In contrast, a substantial 55% of respondents reported being either “Not worried” (16%) or “Not worried at all” (39%) about the earthquake’s effects on the tourism sector. The earthquake’s occurrence near Marrakech, a renowned tourist destination, likely intensifies these concerns, as the city’s tourism sector is pivotal to the nation’s overall tourism industry. Potential disruptions to key tourist attractions, accommodations, and

transportation infrastructure could adversely affect visitor perceptions and, consequently, tourist arrivals and revenues nationwide. (see figure 23).

Figure 23: Concerns Regarding the Impact of the Earthquake on the Tourism Industry



Communication during the Crisis

The Moroccan Communication Landscape

Communication holds the key to an efficient disaster management. The aim of crisis communication broadly is to inform, educate and communicate with various stakeholders with a view to create resilience and confidence among them and communities at large. However, the role of the media in disasters, a very traditional concept, is changing with the landscape of technology. Their value is still apparent, but their role has been augmented by the explosion of social media. Mass media like newspapers, radio and television also play a vital role in disaster communication but primarily facilitate one-way information dissemination. While social media such as Facebook, Twitter, or the internet in general on the other hand create two-way interaction opportunities among organizations, the

public, and individuals⁶. The communicational relationship is digitalized, horizontal, multi-referential, and multidirectional, where everyone can be senders and receivers of messages. Unfortunately, the rise of social media has ignited an unprecedented circulation of false information in our society, causing harm to populations and social groups regarding adherence to preventive measures. How the public views the media is also changing with this new technology.

The Moroccan media landscape is divided into audio, visual, written (press) and electronic press, and social media. Despite the opening up of the license attribution to the private sector in 2006 and 2008, alongside the 2004 Audiovisual communication law⁷ ending the government monopoly over it, the Moroccan TV sector remains in majority State-owned, with editorial policies tailored to match. In fact, out of the TV channels licensed in Morocco, eight belong to the State and one has the State as its majority shareholder⁸. Al Aoula and 2M are some of the most accessible TV channels as they do only require an aerial antenna to be received. The channels broadcast programming predominantly in Arabic and French. Spanish and Amazigh can also be seen, especially in Channel 1, through some news bulletins. The country also comprises more than 20 radio stations, some of which are national, while others are regional. As for press, there are over 600 newspapers that are diverse in terms of language, i.e. Arabic and French mainly, and less in Amazigh and Spanish; diversified in terms of the periodicity of their publishing, i.e. daily, weekly, semi-monthly and monthly; vary in terms of their orientations, ranging between independent or party affiliated newspapers; and are diverse in terms of their interests, as news press or specialized press. The emergence of online news sites has radically

6 JD Fraustino, Liu B, Jin Y. 2012. "Social Media Use during Disasters: A Review of the Knowledge Base and Gaps," Final Report to Human Factors/Behavioral Sciences Division, Science and Technology Directorate, U.S. Department of Homeland Security. College Park, MD: START.

7 Three specific laws exist to regulate the media sector in Morocco: The post and telecommunications law (1997); The broadcast law (2005); The Press and Publications Code (2016).

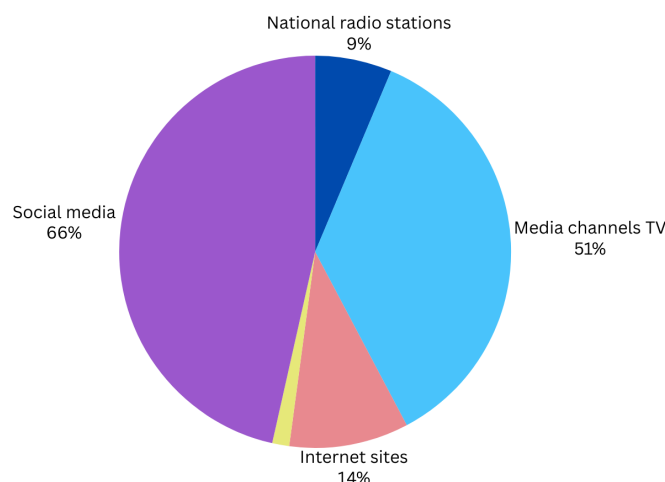
8 <https://maroc.mom-gmr.org/en/media/tv/>

altered news provision and media consumption patterns in Morocco.

Findings

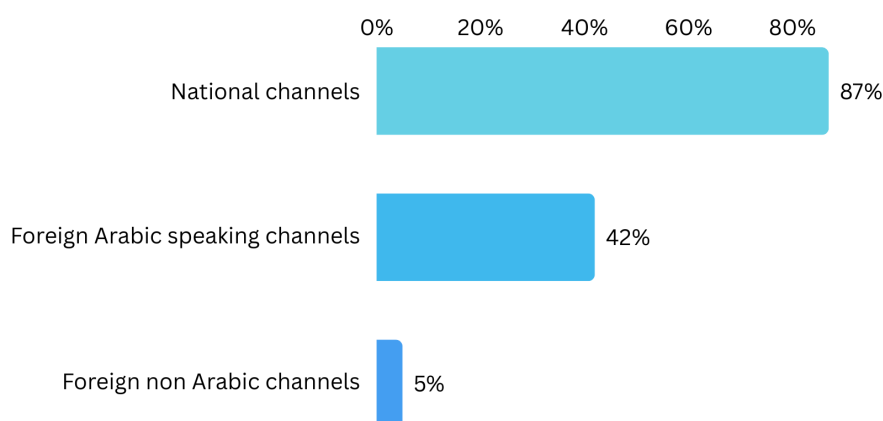
As respondents were asked to select 2 or 3 options from the provided list, the survey results unveil a fascinating landscape of information consumption during the earthquake, with social media emerging as the predominant source, garnering a substantial 66% of respondents' reliance. This underscores the pervasive influence of platforms such as Facebook, WhatsApp, YouTube, and Twitter in disseminating real-time updates and fostering community engagement during crisis situations. Following closely, media TV channels played a significant role, capturing the attention of 51% of participants, affirming the enduring impact of television as a primary source of news. Meanwhile, internet sites secured a noteworthy but comparatively lower share at 14%, indicating a shift towards online platforms for information retrieval. Traditional newspapers and national radio stations demonstrated lesser popularity, with only 2% and 9% of respondents, respectively, turning to these more conventional sources. (See Figure 24)

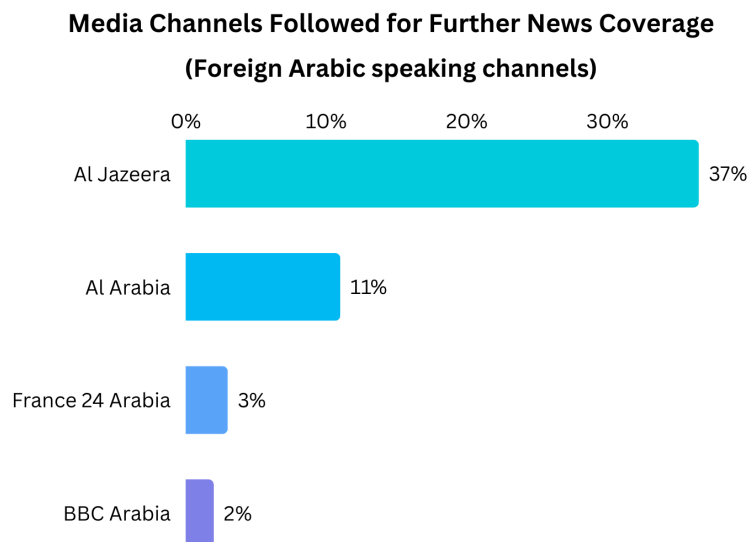
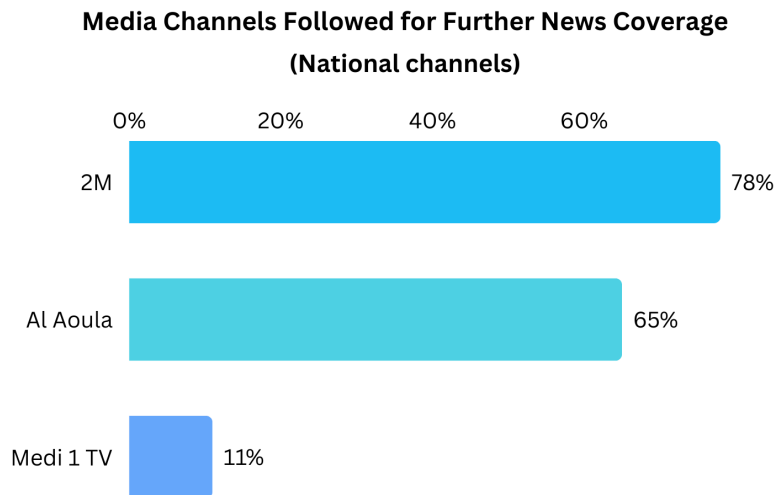
Figure 24: Sources Used for Obtaining News and Information about the Earthquake



The analysis of responses to the question regarding follow-up media channels for earthquake news reveals noteworthy trends in the information-seeking behavior of the surveyed population. Again, respondents were asked to select 2 or 3 options from the provided list. A significant 87% of respondents displayed a strong preference for national channels, with 65% favoring Al Oula, 78% choosing 2M, and 11% opting for Medi 1 TV. This overwhelming reliance on domestic sources underscores the perceived credibility and trust associated with national news outlets during times of crisis. Additionally, 42% of participants demonstrated interest in foreign Arabic-speaking channels, including Al Jazeera (36%), Al Arabia (11%), France 24 Arabia (3%), and BBC Arabia (2%). This dual focus on both national and Arabic-speaking foreign channels indicates a nuanced approach to news consumption, with respondents seeking a balance between local and regional perspectives. Furthermore, 5% of respondents indicated a preference for foreign non-Arabic channels. Although a smaller percentage, this group represents individuals who turn to international sources for a broader global context and potentially a different narrative surrounding the earthquake (see figure 25).

Figure 25: Media Channels Followed for Further News Coverage





The survey delved into participants' experiences with misinformation or fake news related to the earthquake. Notably, 42% of respondents reported encountering news about the earthquake that later turned out to be fake or incorrect. Out of those who reported encountering misinformation, a substantial 79% attributed the fake or incorrect news to social media platforms such as Facebook, WhatsApp, YouTube, and Twitter. The prevalence of misinformation highlights the challenges in disseminating accurate and reliable information during crisis situations, emphasizing the importance of

media literacy and effective communication strategies to combat the spread of false information. (see figure 26 and 27).

Despite the potential association of social media with the dissemination of fake news, the survey results indicate a predominantly positive perception of its role during the earthquake crisis. A substantial 77% (31% very positive; 46% Positive somehow) of respondents expressed positive views regarding the role of social media influencers. This positive outlook may be attributed to social media influencers' ability to rapidly disseminate information, raise awareness, and provide support during crises. However, it is crucial to acknowledge the 23% who held a negative view, with 14% considering the role negative to some extent and 9% very negative. (see figure 28).

Figure 26: Encounter with Fake or Incorrect News about Earthquake

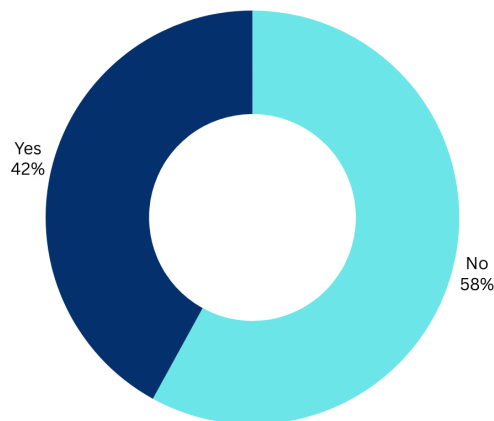


Figure 27: Sources of Fake News

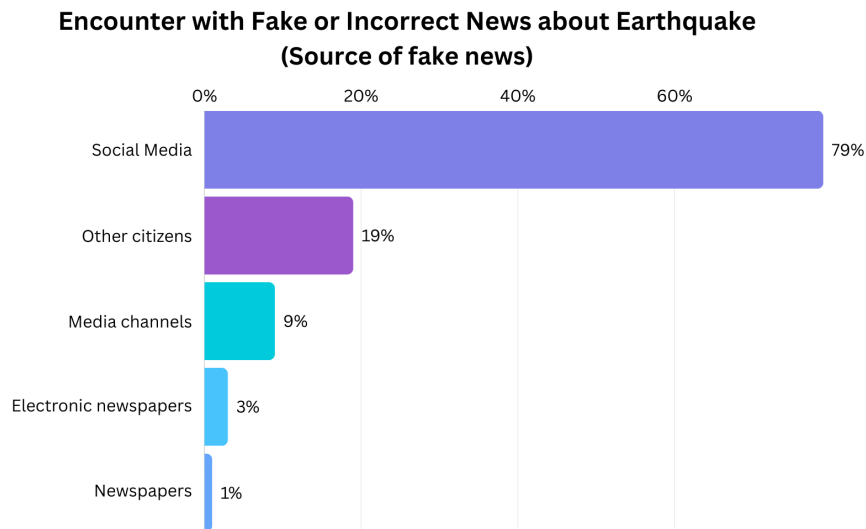
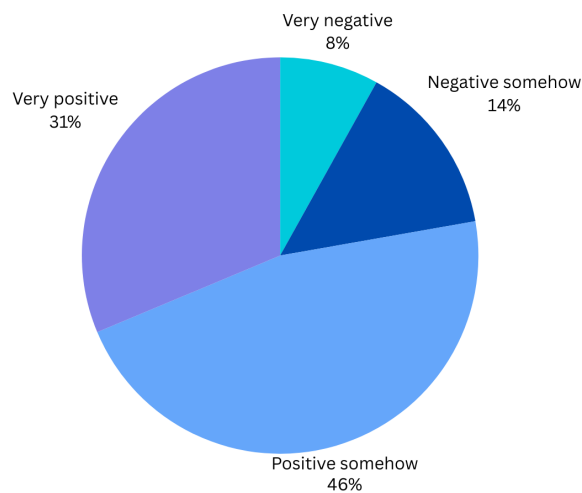


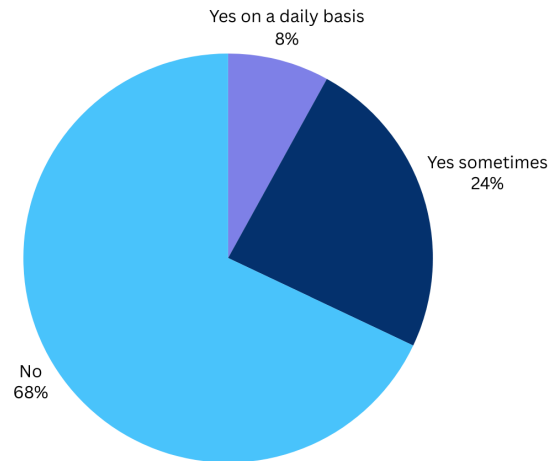
Figure 28: Perception of Social Media Influencers' Role during Crisis



The survey investigated participants' engagement with social media during the earthquake crisis, shedding light on the diverse ways individuals chose to participate in the online conversation about the event. A significant 68% reported not sharing any content on platforms like WhatsApp, Facebook, or Twitter about the earthquake. Conversely, 24% of participants indicated sharing content on social media, albeit occasionally. This group represents individuals who engaged selectively in sharing information, suggesting a willingness to contribute to the online discourse about the earthquake,

but not on a regular basis. A smaller percentage, 8%, reported sharing content on a daily basis. (see figure 29)

Figure 29: Social Media Sharing Behavior during Earthquake Crisis



Upon cross-tabulating this question with gender, the findings revealed that among males, 8% shared content about the earthquake, while 24% occasionally did so. In comparison, 9% of females shared content, with 23% occasionally engaging in such sharing activities. (see figure 30)

During the earthquake crisis, individuals' engagement with social media varied across different demographics. Employed participants demonstrated mixed levels of involvement, with 9% sharing content daily and 25% doing so occasionally, while 66% did not engage in sharing at all. Similarly, unemployed individuals exhibited diverse patterns, with 11% sharing daily, 24% occasionally, and 65% not sharing at all. Among students, 11.5% shared daily, 31% occasionally, and 58% did not engage in sharing earthquake-related content. (see figure 31)

Figure 30: Social Media Sharing Behavior during Earthquake Crisis/Gender Patterns

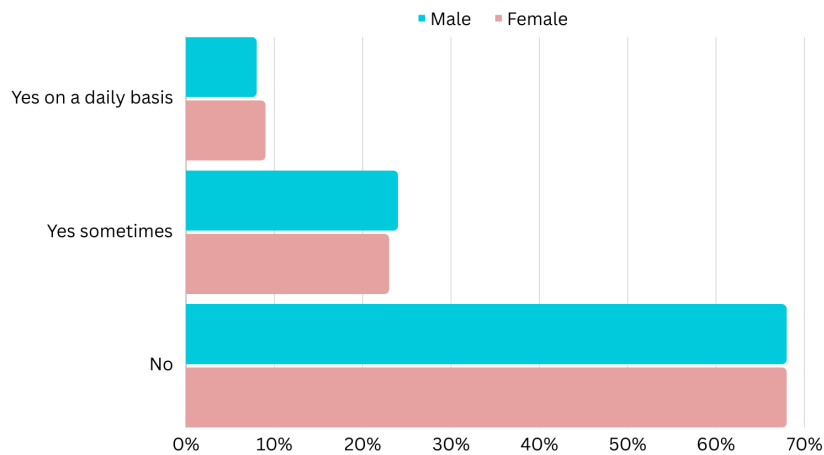
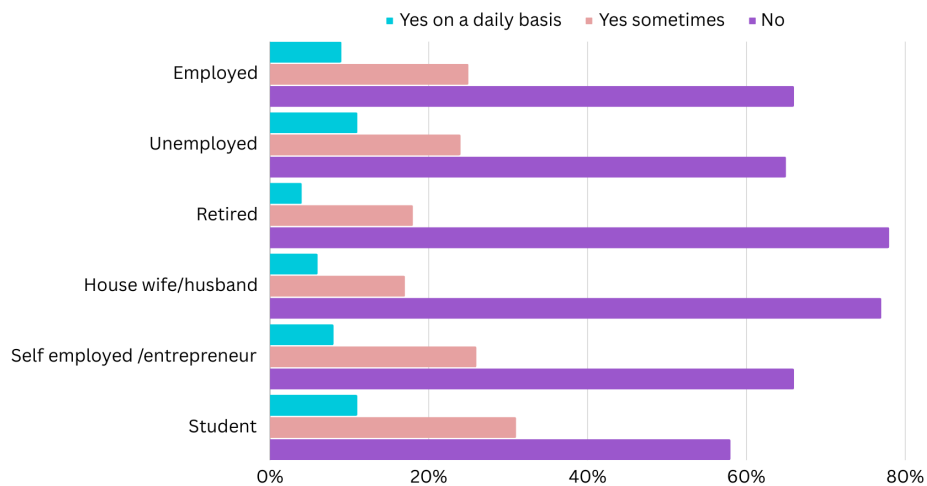
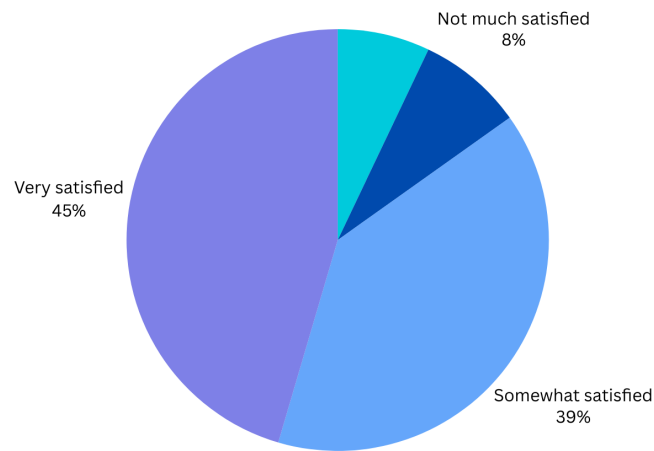


Figure 31: Social Media Sharing Behavior during Earthquake Crisis/ Employment Status Pattern



In the assessment of respondents’ satisfaction with Moroccan public media communication during the earthquake crisis, a substantial 84% (comprising 45% very satisfied and 39% somewhat satisfied) indicated a favorable perception of the effectiveness and reliability of public media channels in disseminating information. Conversely, a collective 15% of respondents expressed varying degrees of discontent, with 8% reporting dissatisfaction and an additional 7% stating they were not satisfied at all with Moroccan public media communication during the earthquake crisis. (see figure 32).

Figure 32: Respondent Satisfaction with Moroccan Public Media Communication during Earthquake Crisis



Examining the respondents' trust in the news published by the government concerning the earthquake, 82% (45% complete trust and 37% somehow trust) demonstrated varying levels of confidence in the information and news disseminated. In contrast, 18% exhibited skepticism, with 9% indicating limited trust, and an equivalent 9% expressing no trust at all in the government's earthquake-related news. (see figure 33). Similarly, the survey results highlight a significant divergence in respondents' satisfaction levels with the Moroccan government's communication with citizens during the earthquake crisis. A substantial 74% expressed satisfaction, with 44% indicating being very satisfied and an additional 30% reporting somehow satisfied. (see figure 34)

Figure 33: Trust in Government-Published News Regarding the Earthquake

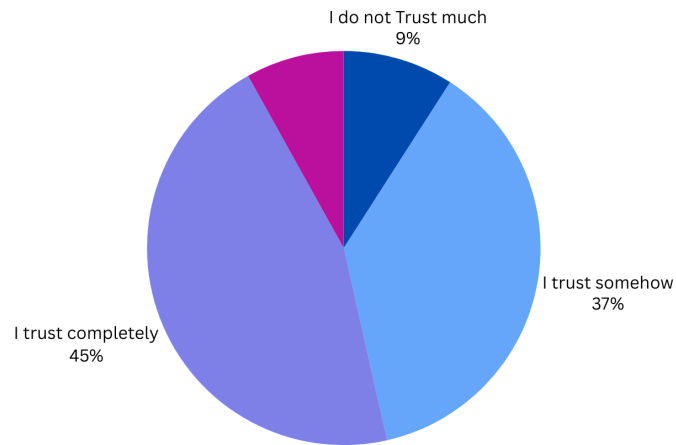
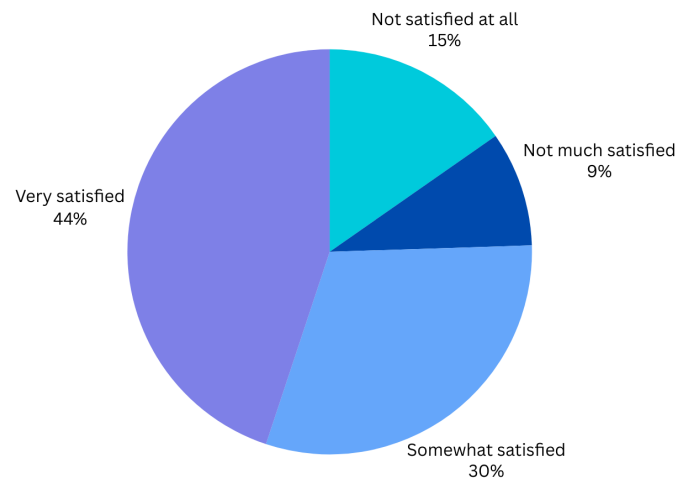


Figure 34: Satisfaction with Moroccan Government's Communication during Earthquake Crisis



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