Enhancing Accessibility and Inclusion: Assessing Layout Design, and Visual Elements in #KuyaKimAnoNa Segment for Deaf Viewers

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Abstract

This study explores how adjusting the size of sign language insets and the graphic design elements within the "#KuyaKimAnoNa" news segment of GMA Network, Inc.'s "24 Oras" TV newscast in the Philippines can enhance inclusivity for deaf viewers. It applies Universal Design Principles and Bortha's Minimalism Theory to assess the effectiveness of these visual components. Using Cochran's equation with a 95% confidence level and a 9% margin of error, the research surveyed 117 deaf individuals. The analysis revealed that 55.6% of respondents were female, 41.9% male, and 2.6% preferred not to disclose their gender. Most participants, aged 18 to 64, regularly watched TV news. The survey showed that 81% of respondents preferred a sign language inset three times larger (occupying 11.11% of the TV screen), while 23.08% preferred a two-fold increase (occupying 7.4% of the screen). 7.69% found the current size (occupying 3.7% of the screen) inadequate. Additionally, 85.47% noted that static and motion graphics aided their news reading. These results emphasize the significant role of visual elements and sign language inset size in facilitating deaf viewers' understanding of news narratives. The study emphasizes improving news delivery and comprehension among the deaf community, which suggests greater sign language insets and minimalist visual design to limit distractions. A well-organized layout is also essential.

Keywords: Inclusivity, deaf viewers, graphic design, sign language inset size, news broadcasting, #KuyaKimAnoNa segment, 24 Oras newscast.

1. Introduction

1.1 Rationale and Background of the Study

Multimedia practitioners endeavor to uphold the principles of Human Rights Article 19, ensuring unhindered access to information and ideas through any means (United Nations, n.d.). However, individuals with disabilities, such as those with hearing impairments, often encounter barriers to obtaining reliable information. Hearing loss, ranked as the fourth most prevalent disability globally by the World Health Organization, underscores the reliance of individuals with hearing impairments on visual mediums for communication.

Deaf individuals frequently confront obstacles in accessing information, primarily due to difficulties understanding televised news or reading newspapers (Munoz-Baell, 2000). Moreover, research by Yi et al. (2021) underscores the pivotal role of subtitles in addressing this gap. Contrary to common misconceptions, DHH individuals utilize sign language, enhancing their comprehension and learning (Gennari et al., 2013). However, distractions in visual elements on screens often divide their attention, hindering concentration (Gennari et al., 2013).

Espineda (2023) emphasizes the criticality of information's accuracy, dependability, and timeliness for informed decision-making, particularly underscoring the need for inclusivity. The Sustainable Development Goals (SDGs), as outlined by Diversity & Inclusion (n.d.), prioritize diversity and inclusion, aiming to reduce inequalities by promoting social, economic, and political inclusion for all individuals by 2030.

The importance of diversity and inclusion resonates throughout the SDG framework, urging stakeholders to collaborate in eradicating inequities and empowering marginalized groups (Diversity & Inclusion, n.d.). Unfortunately, the deaf community often faces neglect, echoing broader societal patterns of overlooking minority groups and individuals with disabilities. Reviewing existing research and understanding the prevalence of hearing loss across various demographics is imperative (Mitchell & Karchmer, 2006; Espineda, 2023).

In a study conducted by Espineda (2023), the experiences of deaf participants were described. The participants expressed dissatisfaction with the inset's size in the coverage of the 2019 Philippine SONA by GMA News. They felt that the small size (approximately 37/10 or 3.7% of the TV screen) of the inset adversely affected the interpreters' ability to translate the message effectively. Furthermore, he adds that the deaf participants mentioned that they could not see what the interpreter was signing, resulting in a lack of understanding. This led them to believe that the TV network had included the inset for appearance's sake (Espineda, 2023).

Television news programs like GMA Network Inc.'s 24 Oras newscast in the Philippines integrate sign language interpreters. Furthermore, one of its segments titled #KuyaKimAnoNa? hosted by Alejandro "Kuya Kim" Atienza, delivering essential trivial information and captivating graphics that keep viewers engaged. For instance, on the segment's featured topic about the 124th Independence Day, Kuya Kim appeared inside a visual representation of Emilio Aguinaldo's Bahay na Bato, where lawyer Ambrosio Rianzares Bautista first waved the Philippine Flag. The captivating graphics elements shown on the particular segment's featured topic have been used to enhance accessibility and engagement (Viernes, 2022). Delbert (2023) argues that graphics aid in understanding complex stories and evoke emotional connections with viewers. However, while visuals can benefit the deaf audience, they may pose challenges by dividing attention (Rodrigues et al., 2016).

Fig. 1 #KuyaKimAnoNa Segment Featuring the 124th Philippine Independence Day

Accessibility extends beyond physical barriers to electronic technologies (Common Issues and Barriers to Access, n.d.).

Botha's (2017) minimalist theory suggests that excessive visuals may hinder comprehension, guiding researchers to consider minimalistic approaches to address accessibility challenges for the deaf and hard-of-hearing community.

Despite efforts to uphold principles of universal access to information, barriers persist for individuals with disabilities, notably those with hearing impairments. The gap in the study lies in understanding how the news content, such as televised news and graphic elements in the #KuyaKimAnoNa segment of GMA's 24 Oras newscast, can be optimized to enhance accessibility for the deaf and hard-of-hearing (DHH) community while considering potential challenges such as distraction and comprehension barriers. This research seeks to bridge this gap by exploring the effectiveness of sign language integration and visual elements in improving accessibility and inclusivity for DHH individuals, aligning with universal design principles and promoting social inclusion outlined in the Sustainable Development Goals (SDGs).

1.2. Purpose of the Study

This study aims to assess the influence of various graphic elements on deaf viewers' comprehension of the #KuyaKimAnoNa segment of GMA Network, Inc.'s 24 Oras newscasts. The study has the following specific objectives: (1) Determine if the sign language interpretation effectively conveys the central message of the news. (2) Evaluate the impact of layout and graphical designs on the interpretation of the news. (3) Assess whether moving visual elements, such as news headers and crawlers, distract viewers from the news report. (4) Identify effective practices that promote an easy understanding of news content for deaf viewers, fostering inclusivity.

Fig. 2 Screenshot of #KuyaKimAnoNa Segment Featuring Numerous Graphical Elements

2. Methodology

2.1 Research Design

A survey research design was employed to investigate the influence of the graphical components in the #KuyaKimAnoNa segment of GMA Network's 24 Oras Newscast. This research examined individuals' attitudes, opinions, and behaviors concerning a specific issue or topic. It involved gathering data from a sample or the entire research population to conclude the broader population. However, it is essential to note that this study's findings apply only to the selected respondents, who were conveniently chosen for the research.

2.2 Research Instruments

For this study, a self-administered survey questionnaire was developed. The questionnaire encompassed several sections, including the respondents' socio-demographic profile, their exposure to TV newscasts, and graphical components that were considered influential factors affecting their responses.

2.3 Sampling and Population

The 117 respondents were identified using this formula and Cochran's Equation with a confidence level of 95% and an error margin of 9%.

Cochran's Formula:

$$N0 = Z2pq / e2$$

Where:

- N0 = is the sample size,
- Z2 = is the abscissa of the standard curve that cuts off an area α at the tails.
- α) = equals the desired confidence level
  - e = is the desired level of precision
  - p = is the estimated proportion of an attribute present in the population, and q is 1-p.
  - The value for Z is found in statistical tables containing the area under the standard curve.

2.4 Research Respondents

The study's respondents were conveniently chosen students from a Deaf Community on Facebook with 7,900 members. They were, however, permitted to invite additional Deaf responders who were able to watch the #KuyaKimAnoNa segment of GMA-7's 24 Oras newscast.

2.5 Data Collection Plan

A self-administered questionnaire was provided to chosen student responders via a Facebook group.

2.6 Data Analysis

Since the study was descriptive, data were analyzed using frequency counts and percentages.

Formula:

P= F / N x 100

Where:

P = percentage
F = frequency
N = total number of respondents

3. Results

3.1 The Respondent's Socio-demographic Profile

The sociodemographic profile of the 117 survey respondents reveals a slightly higher representation of women, comprising 55.6% of the sample, compared to men, who accounted for 41.9%. A small percentage, 2.6%, opted not to disclose their gender. The age range of the participants spans from 18 to 64 years old, reflecting a diverse cross-section of individuals from various life stages. Given that most of these respondents would have been TV news viewers at their respective ages, it suggests a broad demographic encompassing young adults, middle-aged individuals, and possibly some older adults. This diversity hints at various perspectives and experiences that could influence survey outcomes.

Moreover, the reference to "Philippines: Video Viewers by Age Group and Platform 2020" suggests a possible cultural context, indicating that the survey may have been conducted within the Philippines or targeted individuals with similar media consumption patterns. However, it is crucial to recognize that this data might only partially capture the preferences of younger generations who primarily consume news through digital platforms. The small percentage of respondents who chose not to reveal their gender indicates privacy or discomfort, which should be considered when interpreting the survey results. Overall, this sociodemographic profile provides valuable insights into the composition of the survey sample and the potential influences on their perspectives and behaviors. (Table 1).

Table 1. Socio Demographic Profile of the Respondents

Age Group	Male		Female		Prefer not to say	
18 - 64 yo	*f*	%	*f*	%	*f*	%
	49	41.90%	65	55.60%		

Gender	*f*	%
Male	49	41.90%
Female	65	55.60%
Prefer Not to Say	3	2.60%
Total	117	100%

3.2 Appropriate Sign Language Inset Size to Proper Convey Message to Deaf Viewers

Feedback was gathered from deaf respondents regarding their preferred size for the sign language interpretation section to assess its effectiveness in conveying the news's main points. Out of the respondents, 81 individuals (69.23%) expressed their desire for a sign language inset that is three times (1/9 or 11.11%) larger than the current size (37/10 or 3.7%). Conversely, 27 respondents (23.08%) indicated a size two times larger (37/5 or 7.4%) than the current one (37/10 or 3.7%) would be preferable. Additionally, nine individuals (7.69%) stated that the existing size was adequate (Table 2).

Table 2. Distribution of the appropriate size of the inset as determinant of the responses

Size of the Sign Launage Inset	*f*	%
Current Size	9	7.69%
Twice Bigger	27	23.08%
Four Times Bigger	81	69.23%
Total	**117**	**100%**

Fig. 3. Sign Language Inset's Current Size

Fig. 4. Sign Language Inset's Twice Bigger than its Current Size

3.3 Graphics Components Influencing Deaf Comprehension of the Translated Message

In this study, the researchers sought the opinions of Deaf respondents regarding the potential impact of the program news logo on their comprehension of the material presented in a sign language inset. When asked whether the logo could interfere with their understanding, a significant majority (85.47 percent or 100 votes) responded affirmatively, wanting to modify or eliminate the program news logo. Conversely, fewer individuals (17 people or 14.54%) reported being unaffected by the logo (Table 3).

Table 3. Distribution of the effect of program news logo as determinant of the responses

Program News Logo	*f*	%
Yes	100	85.47%
No	17	14.53%
Total	**117**	**100%**
Removal or Replacement of the News Logo	***f***	**%**
Yes	100	85.47%
No	17	14.53%
Total	**117**	**100%**

Fig. 5. Photo of the Program News Logo

Simultaneously, the researchers investigated whether the deaf participants' comprehension of the sign language inset would be influenced by their knowledge of the segment name. Out of the ninety-seven respondents, which accounted for 82.9% of the total, a majority expressed a positive response. Conversely, twenty participants (17.1%) responded negatively, as indicated in Table 4.

Table 4. Distribution of the effect of segment name as determinant of the responses		
Segment Name	***f***	**%**
Yes	97	82.90%
No	20	17.10%
Total	**117**	**100%**
Removal or Replacement of the Segment Name	***f***	**%**
Yes	97	82.90%
No	20	17.10%
Total	**117**	**100%**

Fig. 6. Photo of Segment Name

Meanwhile, Deaf participants were surveyed to determine the impact of time display visuals on their comprehension of the news message/content conveyed through a sign language interpreter via a sign language inset. The findings revealed that most (92.02% or 110) of deaf respondents reported a positive influence. Additionally, a majority (110 or 92.02%) expressed a desire to remove or replace the time display visuals as they hindered their comprehension. In contrast, a minority of respondents (7, or 5.98%) indicated that the time display did not affect them (Table 5).

Table 5. Distribution of the effect of time display as determinant of the responses		
Time Display	***f***	**%**
Yes	110	92.02%
No	7	5.98%
Total	**117**	**100%**
Removal or Replacement of the Time Display	***f***	**%**
Yes	100	92.02%
No	7	5.98%
Total	**117**	**100%**

Fig. 7. Photo of Program's Time Display

In contrast, when researchers distributed a Google Form containing self-administered questionnaires, which included photos featuring screenshots from the #KuyaKimAnoNa video along with other graphical elements, to Deaf participants via their Facebook group with the assistance of one of its members, they aimed to assess the potential impact of these visuals on the comprehension of the news message conveyed by the sign language interpreter through the inset. An overwhelming majority of 105 individuals, comprising 89.74% of the Deaf respondents, reported that the graphical components in the provided images influenced their understanding. Moreover, the researchers solicited feedback from the Deaf participants regarding which specific images they found impactful and which ones they preferred to be removed or substituted.

Among the respondents, 37 individuals (31.62%) expressed a desire to eliminate or replace the five (5) screenshots provided, while 24 individuals (20.51%) wished to remove or replace the four (4) displayed screenshots. Additionally, 23 respondents (19.66%) preferred removing two (2) screenshots from the video photos. Furthermore, 20 individuals (17.09%) requested removing or replacing three (3) screenshots from the displayed video photographs. Finally, 13 individuals (11.11%) preferred to erase or replace a specific screenshot from the displayed video photo (Table 6).

Table 6. Distribution of the Videos with Other Graphical Components (Screenshots) as determinant of the responses		
Screenshot of Videos with Other Graphic Components	***f***	**%**
Yes	105	89.74%
No	12	10.26%
Total	**117**	**100%**
Screenshot Videos with Graphical Components	***f***	**%**
One	13	11.11%
Two	23	19.66%
Three	20	17.09%
Four	24	20.51%
Five	37	31.62%
Total	24	**100%**

Fig. 8. **Screenshot of the video (Photo #1)**

Fig. 9. **Screenshot of the video (Photo #2)**

Fig. 10. **Screenshot of the video (Photo #3)**

Fig. 11. **Screenshot of the video (Photo #4)**

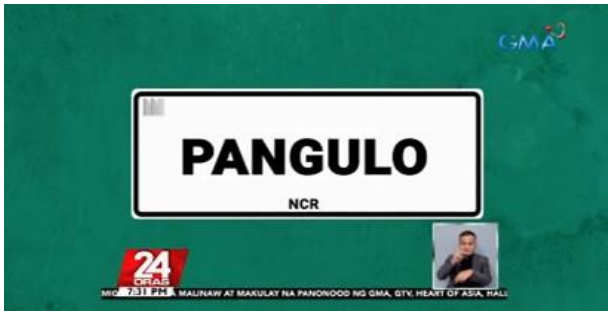

Fig. 12. **Screenshot of the video (Photo #5)**

3.4 Moving Graphical Components, such as the news header and news crawler, reduce viewers' attention to the news report (message interpreted)

Regarding the moving graphical components of the #KuyaKimAnoNa segment in 24 Oras newscasts, a survey was conducted among deaf respondents to assess the impact of these components, such as the news header, on their comprehension of the translated news message delivered by the sign language interpreter through sign language inset. Of the respondents, 92 individuals, or 78.63%, responded positively, indicating that the moving graphical element could affect their understanding. Furthermore, the same 92 respondents preferred removing or replacing those mentioned above moving graphical elements. Conversely, a minority of 25 individuals, or 21.37%, responded negatively to this question (Table 7).

Table 7. Distribution of the effect of moving graphic item (news header) as determinant of the responses

Moving Item (News Header)	*f*	%
Yes	92	78.63%
No	25	21.37%
Total	**117**	**100%**
Removal or Replacement of the Moving Item (News Header)	***f***	**%**
Yes	92	78.63%
No	25	21.37%
Total	**117**	**100%**

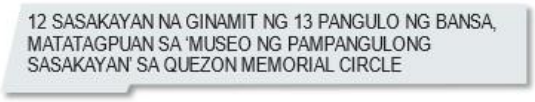

Fig. 13. Photo of the Moving Graphical Component (News Header)

Similarly, the researchers asked the deaf participants about the potential influence of a moving graphical element, like a news crawler, on their understanding of the translated news content. An overwhelming majority of 110 participants, accounting for 94.02%, responded positively, acknowledging the impact of the news crawler. In contrast, 5.98% of seven deaf respondents stated that the news crawler did not affect their comprehension (Table 8). The researchers also noted the participants' desire to eliminate or substitute those mentioned above moving graphical components.

Table 8. Distribution of the effect of moving graphic item (news crawler) as determinant of the responses

Moving Item (News Crawler)	*f*	%
Yes	110	94.02%
No	7	5.98%
Total	**117**	**100%**
Removal or Replacement of the Moving Item (News Crawler)	***f***	**%**
Yes	110	94.02%
No	7	5.98%
Total	**117**	**100%**

Fig. 14. Photo of the Moving Graphical Component (News Crawler)

4. Discussion

4.1 Appropriate Sign Language Inset Size to Proper Convey Message to Deaf Viewers

The effectiveness of sign language interpretation in conveying the primary message of news broadcasts is increasingly recognized as a vital issue, particularly regarding the size of the sign language inset displayed on television screens. Feedback from the deaf community underscores the urgent necessity for adjustments to enhance comprehension.

According to the gathered data, a significant majority of respondents, constituting 81 individuals (69.23%), advocate for a threefold increase in the size of the sign language inset compared to its current dimensions. Conversely, 27 respondents (23.08%) suggest doubling the size, while nine individuals (7.69%) find the existing size adequate. These preferences reflect a consensus on the imperative for change due to the current inset's diminutive size, approximately 37/10 or 3.7% of the TV screen.

Scholars such as Leneham and Napier (2011) highlight the impact of the sign language inset's size on clarity and comprehensibility. They argue that a size reduction not only diminishes image sharpness but also impedes the conveyance of essential nuances of signing, such as facial expressions and fingerspelling. This perspective reinforces Espineda's study (2023), which underscores the critical role of hand gestures and facial expressions in effectively communicating messages to the deaf community.

Espineda's study (2023) reveals that both sign language interpreters and deaf individuals advocate for a minimum size requirement of one-ninth or 11.11% of the television screen to enhance accessibility and comprehension for deaf viewers. They argue that enlarging the inset facilitates more straightforward interpretation and aligns with the needs of the deaf community. Furthermore, they posit that such adjustments would meet retention requirements and enhance the inset's functional relationship within the interpreting system.

The current size of the sign language inset on television screens fails to meet the needs of the deaf community, thus impeding the effective communication of the news's central message. Enlarging the inset, as recommended in Espineda's study (2023), is crucial for improving accessibility and ensuring equitable access to information for deaf viewers. Guidelines on Access to Information in National Sign Languages during Emergency Broadcasts (n.d.) underscore the importance of adequately sized insets, suggesting that for broadcasts with a single presenter, the interpreter inset should ideally occupy a space no smaller than 1/6 or 16.6% of the screen, or be 1/3 or 33.33% of the screen in size.

Fig. 15. Photo of the Inset Adequate Size According to Guidelines on Access to Information in National Sign Languages during Emergency Broadcasts, n.d.

4.2 Graphics Components Influencing Deaf Comprehension of the Translated Message

The impact of layout and graphical designs on the interpretation of news, particularly for Deaf individuals, is substantial and multifaceted. This study delves into the nuanced relationship between graphic elements and comprehension, shedding light on the preferences and challenges faced by Deaf viewers.

The findings reveal a consistent pattern: various graphical elements, including program logos, segment names, time displays, and additional visuals such as images, significantly affect the comprehension of news content conveyed through sign language insets. For instance, most Deaf respondents wanted to modify or eliminate program logos, segment names, and time displays, citing distractions that impede their focus on the sign language interpreter. Moreover, screenshots and other visuals further exacerbate this issue, as they can obstruct the interpreter's view, making it challenging for Deaf individuals to follow the signing.

The study aligns with existing research by Muir (2005) and Berge & Thomassen (2015), which underscores the sequential focus of Deaf viewers and the importance of minimizing visual distractions to facilitate adequate comprehension. Bosch-Baliarda (2021) further emphasizes the need for seamless integration of visual information into sign language discourse to foster positive engagement while avoiding obstacles that hinder visibility or disrupt the interpretation process.

To address these challenges, the application of universal design principles is paramount. Equitable use, simplicity, and error tolerance guide the creation of accessible graphical designs. Equitable use ensures that designs cater to individuals with diverse abilities, such as incorporating sign language insets for Deaf viewers. Simplicity in design promotes universal understanding, while error tolerance minimizes the adverse consequences of unintended actions, enhancing user experience and safety.

Moreover, embracing minimalism in graphical design can mitigate distractions and prioritize essential visual elements. Consulting the Deaf community to identify critical components and potential distractions is crucial, ensuring that graphical designs effectively support comprehension without hindering interpretation.

The impact of layout and graphical designs on the interpretation of news by Deaf individuals underscores the importance of thoughtful design considerations. News outlets can improve accessibility and inclusivity by using universal design principles and sticking to

minimalist graphic components. That will help them communicate with Deaf viewers more meaningfully.

4.3 Moving Graphical Components, such as the news header and news crawler, reduce viewers' attention to the news report (message interpreted)

The impact of moving visual elements, such as news headers and crawlers, on viewers' attention during news reports has been scrutinized. In the context of the "#KuyaKimAnoNa" segment within GMA Network's 24 Oras newscasts, a survey targeting deaf participants shed light on the significance of these graphical components. The study revealed that a considerable majority, 78.63%, of respondents acknowledged that such moving elements could affect their comprehension of the news, mainly when delivered via sign language interpretation. Moreover, the majority preferred removing or replacing these distracting elements.

Similarly, when asked about the influence of a news crawler, an overwhelming majority, 94.02%, of deaf participants recognized its impact on their understanding of the news content. This aligns with their desire to eliminate or substitute such moving graphical components. These findings underscore the considerable influence of moving graphical elements on the comprehension of deaf individuals, especially when positioned near sign language insets, potentially diverting their focus from the interpreter.

Understanding the neurological implications behind these observations enriches our comprehension. Hauthal et al. (2013) revealed motion-selective visual regions in deaf individuals, indicating specific adaptations in visual processing due to sensory deprivation. Contrary to assumptions, Laurent et al. (2019) highlighted that deaf individuals face challenges in temporal processing, suggesting dynamic presentations could aid in compensating for these difficulties. Furthermore, insights from Jones et al. (2017) and Xiao et al. (2021) emphasized the intricate interplay between sensory modalities and motion perception in deaf individuals, shedding light on the complexity of visual processing in this population.

Considering these insights, redesigning the visual layout of news broadcasts to accommodate the needs of deaf viewers emerges as a viable solution. Simplifying graphical components can enhance functionality and promote inclusivity, ensuring equitable access to information for individuals with disabilities. Thus, this issue warrants further investigation and action to foster an inclusive media environment. Through collaborative efforts to enhance accessibility, we can cultivate a more inclusive society where all individuals, regardless of ability, can effectively engage with and understand the news.

4.4. Efficient practices that can be implemented so that deaf viewers can easily digest the message of every piece of news

Ensuring news content accessibility for the Deaf community is pivotal for fostering inclusivity. Media outlets can achieve this by incorporating effective practices such as TV insets with sign language interpretation and adhering to universal design principles.

One critical practice is using TV insets to present sign language alongside news broadcasts. Research by Leneham and Napier (2011) emphasizes the importance of clear and visible sign language interpreters to convey nuanced communication aspects like facial expressions and gestures. Understanding these visual cues, as highlighted by Espineda (2023), underscores the necessity for unobstructed sign language insets.

Furthermore, a minimalist graphical design approach is crucial to avoid distractions for Deaf viewers. Collaboration with the Deaf community enables multimedia practitioners to identify and eliminate elements hindering comprehension, aligning with the principles of minimalism advocating for simplicity (Bloomsbury Collections - A Theory of Minimalism).

Moreover, multimedia designers should consider Deaf individuals' cognitive characteristics, such as sensitivity to motion and temporal processing. Research by Laurent et al. (2019) and Xiao et al. (2021) emphasizes dynamic presentations to compensate for time-processing difficulties and enhance cross-modal understanding. Understanding Deaf individuals' unique sensory experiences, as highlighted by Jones et al. (2017), informs motion graphics design that activates motion-sensitive regions without causing distractions.

Promoting news content understanding for Deaf viewers necessitates a multifaceted approach integrating TV insets, minimalist design, and cognitive considerations. Embracing these practices enables media outlets to foster inclusivity and value Deaf individuals in the information-sharing ecosystem.

5. Conclusion

The study revealed that deaf viewers' understanding of news stories was notably affected by

two factors: the size of the sign language inset and the importance of graphical elements in the program #KuyaKimAnoNa. Resizing the sign language inset and choosing a more straightforward graphic design that does not obstruct the interpreter's signing are two suggestions to enhance viewing experiences for the Deaf population. This change aims to reduce distractions from on-screen graphics. Additionally, organizing the layout in a clear and structured manner is essential for enhancing news comprehension among the Deaf, ultimately making news delivery more effective.

Compliance with Ethical Standards

The study adhered to the Ethical Standards of Research in a comprehensive manner. To safeguard the identity of the participants, personal details, including names, addresses, and any unnecessary information, were anonymized in accordance with the Data Privacy Act or Republic Act No. 10173 of the Republic of the Philippines.

Competing Interests

This study is free from any competing interests. The analysis of the results has been conducted solely based on the responses provided by the respondents.

Research Data Policy

The data utilized in the manuscript, along with the pertinent raw data, will be made readily accessible to any researcher interested in using them for non-commercial purposes while ensuring the confidentiality of the participants is maintained.

Data Availability Statements

The data and information supporting the reported results in this article can be located in the references section of the manuscript. The peer reviewer can verify the information presented in the main body of the manuscript by referring to the hyperlinks provided in the references section.

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Authors' Contributions

Dr. Melvin N. Espineda and Sarah Faith Gimeno collaborated on all aspects of the research, from drafting the initial manuscript to analyzing the results and conducting the discussion. The main manuscript was jointly written by Sarah Faith Gimeno and Dr. Melvin N. Espineda, and they also utilized Grammarly for proofreading and editing purposes.

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Annex

Research Instrument

Hello there!

I am Sarah Faith A. [ ] [ ] Gimeno, a student at Mapua University, majoring in AB Multimedia Arts with a focus on Graphic Design. I am researching how the visual elements of GMA 24 Oras, particularly in the #KuyaKimAnona segment, impact the comprehension of the deaf community. I aim to address this issue by proposing a new layout. This research is part of my thesis, supervised by Dr. Melvin N. Espineda, my adviser and co-researcher.

Please assist in answering the following questions. Please note that any information you provide will be treated with confidentiality in accordance with Republic Act No. 10173, also known as the Data Privacy Act, which safeguards all forms of information, whether private, personal, or sensitive.

Current Layout of #KuyaKimAnoNa

1. Does this part of the lower thirds (news logo) affect your understanding of watching the news?

Yes No

If yes, should we remove it or replace it? Encircle your answer

Replace **Remove**

2. Does this part of the lower thirds (segment name) affect your understanding of watching the news?

Yes No

If yes, should we remove it or replace it? Incircle your answer

Replace

Remove

3. `Does this part of the lower thirds (time display) affect your understanding of watching the news?

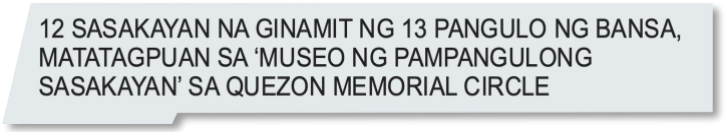
Yes No

If yes, should we remove or replace it? Encircle your answer

Replace

Remove

4. Does this part of the lower thirds (news header) affect your understanding of watching the news?



Yes No

If yes, should we remove or replace it? Encircle your answer

Replace **Remove**

5. Does this part of the lower third (news crawler) affect your understanding of watching the news?

Yes No

6. Does these unwanted graphics affect your understanding of watching the news?
Like this:

Yes No

7. How many unwanted graphics did you want to see in watching #KuyaKimAnoNa?
Incircle your answer.
   A. One unwanted graphics
   B. Two unwanted graphics
   C. The unwanted graphics
   D. It's okay for you to use the unwanted graphics that #KuyaKimAnoNa has?

8. What do you think is the best size for a sign language interpreter?

   A. The current size of a sign language interpreter

   B. Two times bigger the sign language interpreter than the current size?

C. Four times bigger the sign language interpreter than the current size?