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Analysis of User Experience (UX) of Serif and Sans Serif Fonts in Dark Mode Website Display

Gabriel Christian Ilham Satheno, Arvin Claudy Frobenius
Universitas Amikom Yogyakarta, Indonesia
Email: gabriel.1133@students.amikom.ac.id, arvinclaudy@amikom.ac.id

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Abstract

The development of digital interfaces today increasingly emphasizes the importance of visual comfort for users, especially with the rampant use *of Dark Mode* which is considered more comfortable in low light conditions. However, its effectiveness depends heavily on the selection of the right typography. This research aims to analyze the perception of user experience (UX) towards the use of serif and sans serif fonts in the *Dark Mode* display of websites. Through a qualitative approach with 40 participants, data was collected using an open-ended questionnaire and analyzed with *Thematic Analysis*. After testing the data analysis using Thematic Analysis, the findings of this study stated that there are four main points, namely sans serif fonts are predominantly chosen because they provide higher visual comfort, serif fonts although considered aesthetically pleasing but considered disruptive in digital readability, especially in dark mode, most prefer dark mode but the effectiveness of its use is highly dependent on the contrast setting between the background and the color of the text, and simple, organized, and not visually redundant layouts and visual structures tend to increase reading duration and encourage user engagement. On the other hand, a dense or element-packed design distracts concentration and makes users leave the page faster.

INTRODUCTION

The rapid development of technology and the increasing use of screen time on computer devices have made the user experience factor, or *user experience*, crucial in digital products such as websites. This is an increasingly important aspect of digital interface design. The trend has developed alongside the emergence of Dark Mode, or *dark mode*, which features light colors over dark backgrounds and is generally found in applications, websites, and operating systems. A study by Eisfeld and Kristallovich (2020) shows that Dark Mode is becoming a global trend—not only because of aesthetics but also due to visual, psychological, and technological comfort factors. In addition to helping reduce eye strain, especially in low-light conditions, Dark Mode also supports energy efficiency on devices with certain screen technologies (e.g., OLED). Dark Mode allows users to feel more in control and customize the appearance of their device as desired, which can psychologically increase user satisfaction. With its emergence as an option rather than an obligation, Dark Mode has become a symbol of the evolution toward more flexible, accessible, and user-centric UI design.

The choice between serif or sans serif typefaces in interface design often affects the reading experience and user comfort (*UX*). However, an experimental study by Vecino et al. (2022) found that the difference between serif and sans serif fonts from the same font family (Roboto and Roboto Serif) did not have a significant impact on reading speed, text comprehension, or overall usability of e-commerce sites. It is widely observed that commercially focused websites predominantly use sans serif fonts; these findings suggest that such preference is not necessarily based on measurable functional advantages. Interestingly, the study also showed that women tend to prefer serif fonts, indicating that typography preferences could be demographic. Of course, the choice between serif and sans serif fonts is not always directly related to user comfort, as other factors also influence preference. Additionally, user taste and the context in which the website is used play a role.

User Experience (*UX*) is a user's perception or response to their interaction with a system, both during and before use. According to the international standard ISO 9241-210:2019, *UX* is a subjective experience that includes comfort, satisfaction, and the emotional impression of the interface (Kushendriawan et al., 2021, p. 61). In the competitive digital age, functional aspects alone are insufficient; visual convenience, such as font choices and display modes such as Dark Mode, also plays an important role in shaping positive *UX*. As Don Norman, a key figure in the field of design, asserted, "If it doesn't feel comfortable, who cares if it works?" (in Kushendriawan et al., 2021, p. 61). This shows that the success of a design is determined by how comfortable the user feels, not just by the system's performance.

The novelty of this research lies in its effort to fill the gap by analyzing user perception of serif and sans serif fonts in Dark Mode, using a qualitative approach and *Thematic Analysis* to explore visual comfort, eye strain, and user preferences. In contrast to previous research, this study integrates typography and Dark Mode, providing insights designers can apply to improve *UX* in low-light environments.

This research experiment aims to determine how both serif and sans serif types affect user experience in the appearance of websites with Dark Mode. This research provides practical benefits for designers in selecting the optimal font for Dark Mode to improve user reading comfort. Academically, this study fills a knowledge gap regarding the interaction between typography and Dark Mode, while also offering a *Thematic Analysis* methodology for more in-depth exploration of user perception. The research findings can serve as a reference for the development of more inclusive and user-friendly digital interfaces.

RESEARCH METHOD

A qualitative approach was chosen in this study to analyze the perception of visual comfort, eye comfort, and visual preference for two types of fonts, namely serif and sans serif, in Dark Mode on website displays. Participants were asked to read text in both types of fonts in Dark Mode, then provide their opinions on eye comfort, font clarity, and visual preferences. Based on user responses, the researchers identified recurring patterns, grouped answers according to emerging themes, and interpreted the meaning of those themes (Braun and Clarke, 2006 in Akbari et al. (2024)).

The population of this study consisted of users familiar with website appearances, such as those who frequently access e-commerce websites and read news on news portals. Participants were aged 18–35 years, accustomed to reading text on digital screens, and had no significant visual impairments. This study involved 40 participants who met these criteria.

Data were collected through an open questionnaire. Participants were asked to read text in serif and sans serif fonts displayed in Dark Mode, then fill out a questionnaire to provide feedback on their convenience, clarity, and preference for both font types. Bingham (2023) outlines at least five stages in analyzing qualitative data—namely collecting, sorting, understanding, interpreting, and explaining—which was used as the reference process for data analysis.

The research instrument consisted of digital devices such as laptops and web browsers to access the frontend of websites containing content with serif and sans serif fonts in Dark Mode, as well as questionnaires containing questions to collect data on participants' experiences and perceptions.

The research started with creating website views using Figma and implementing them into the frontend. Questionnaires were created with Google Forms, and participants were recruited. Users were asked to read text with both font types on the Dark Mode display and fill out the questionnaire. The collected data were then analyzed using *Thematic Analysis* to identify key themes related to readability and convenience.

This study adhered to ethical principles, including participant consent and data confidentiality. Participants were provided with information about the research objectives and procedures before participation, their identities were kept confidential, and the data were used solely for research purposes without dissemination without permission.

Research Design

A. **Experimental Design**

In creating website appearances with Dark Mode, the researcher referred to the study of Suroya et al. (2024), particularly concerning text alignment, color contrast, font size, spacing between letters, spacing between lines, line length, and spacing between paragraphs. The display created consisted of four website views, featuring two serif fonts and two sans serif fonts. The website sections included the navigation bar, hero section, information section, benefit section, call to action, and footer. The fonts used were selected based on trending filters on Google Fonts that are freely available on Figma, namely: Inter, Poppins, PT Serif, and Noto Serif.

The variables tested were perceptions of visual comfort, eye comfort, and visual preferences of users. To test these variables, open-ended questions were used, the results of which were analyzed at the *Thematic Analysis* stage. Below is a list of questions to test each variable.

User Research Question Guide

Task 1: Visual Exploration

This task aimed to provoke users' initial responses to the interface display. Questions included users' first impressions when viewing all four page designs, opinions about the combination of background colors and text on all four pages, assessments of whether the design looked professional or casual (expressed in everyday language), and perceptions of ease or difficulty in visually understanding the pages.

Task 2: Reading Content

This task explored perceptions of reading comfort within the context of visual design and typography. Questions included the level of comfort when reading text on all four displays, identification of any parts of the text that were difficult to read after detailed viewing, the influence of font size and shape on the reading process (whether it helped or hindered), the impact of dark backgrounds on focus and eye comfort when reading, and the likelihood of fatigue when reading long text in this view.

Task 3: User Experience Assessment

The objective was to explore overall experience, emotions, and comfort from the *UX* perspective. Questions included the overall experience when using all four views, whether the display helped users stay focused and comfortable while browsing, aspects liked and disliked about the four views, changes users would make if possible and why, and whether these views were suitable for long-term use, along with supporting reasons.

Task 4: User Preferences

This task aimed to explore users' personal opinions and habits regarding fonts and Dark Mode. Questions included preferences between serif and sans serif fonts and their reasons, overall comfort with Dark Mode, emotional feelings evoked by the fonts (such as confidence or relaxation), and opinions about the design's ability to influence the user's decision to stay on the website long-term or leave immediately.

Task 5: Font and Dark Mode Details

This task investigated the details of font combined with Dark Mode through specific content-related questions. For the SVNH view, questions included naming one benefit in the "Get all these benefits in our class" section, the meaning of the numbers "435K and 800K," and one FAQ from the FAQ section. For the GJKS view, questions included one benefit of "All

Services According to Your Needs," the number of pediatricians and professional nurses, and one reason for "Why You Should Choose Our Services."

For the BUCK view, questions included the text on the blue call-to-action button below the sentence "With just one simple prompt, we can make it happen the way you expect," the location of BUCK city as indicated in the footer, and other styles that the platform can generate besides "funny cartoons." For the BECK view, questions included one available category, one of the "Great Benefits That Make You Happy," and the customer's name in the "Happy Customer" section that says "Perfect for relaxing while working."

B. **Questionnaire**

In *KBBI*, a questionnaire is a research tool or survey consisting of a series of written questions. The purpose of using this questionnaire was to gather responses from participants who met the predetermined criteria.

RESULTS AND DISCUSSION

Description of Respondent Data

This study involved 40 respondents with diverse backgrounds, including students, college students, and professional workers. Respondents were asked to evaluate four website designs in dark mode, consisting of two designs using serif fonts and two designs using sans serif fonts. Each respondent gave an open response regarding the comfort, readability, and visual impression of each display.

Website Design Survey Analysis in Paragraph Format

Summary of Key Findings

From the analysis of 40 respondents who evaluated four dark mode website designs (SVNH, GJKS, BUCK, and BECK), it was found that **GJKS is consistently the favorite choice** of the majority of respondents. The advantages of GJKS lie in its professional design, the use of sans serif typography that is comfortable to read, the implementation of a balanced dark mode, and a clean and structured layout. Respondents rated GJKS as the most ideal for long-term use, especially for reading, studying, or working activities for a long duration.

GJKS Design Evaluation

GJKS received high appreciation for its minimalist but professional appearance. Respondents described this design with various positive analogies such as "coworking learning space", "modern corporate website", to "premium Canva". The soft pastel color combined with the dark mode that is not too dark keeps the eyes comfortable even for a night reading session. The sans serif typography used is considered proportionate, clean, and modern, giving the impression that users are valued and supported to stay focused. The structured layout and intuitive navigation make respondents feel confident and at home to explore the content further.

SVNH Design Evaluation

SVNH is judged to be a conservative and formal design, often analogous to "PowerPoint templates", "internal presentations", or "campus diktats". Although stable and suitable for long-term use, many respondents complained about font sizes that are too small and colors that are too dark or dim. The testimonial section is often immersed in the background, reducing overall readability. This design is considered too rigid and monotonous, with some respondents even calling it "boring" and "like an empty lecturer's room".

BUCK Design Evaluation

BUCK received the most mixed reactions from respondents, but tended to be negative for practical use. These designs are often described as "art exhibition posters", "contemporary galleries", or "painting exhibition brochures". Despite having high artistic and creative value, BUCK is considered too dark, dense, and tiring to read. The serif fonts used are considered too decorative and old-fashioned, not suitable for digital content consumption. The high color contrast and experimental layout made many respondents feel confused and want to leave the

page immediately. Some respondents even called it "like a light-off room" or "battery-saving mode".

BECK Design Evaluation

BECK is rated as the most playful and visually appealing design, often analogous to "a combination of Pinterest and Shopee", "Korean skincare web", or "children's living room design". The smooth animations and transitions are appreciated, as well as the use of vibrant and bold colors. However, these visual advantages are actually a disadvantage for long-term use. Respondents complained that the design was too crowded, "noisy", and quickly tiring the eyes. Text is often disguised by backgrounds that are too bright or colorful, reducing readability. BECK is considered suitable for brief explorations or compelling first impressions, but it is not ideal for reading long content.

Typography Preferences

The majority of respondents showed a strong preference for sans serif typography over serif. Sans serif is considered more modern, efficient, easy to read in digital format, and not tiring the eyes. Respondents found sans serif to be friendly, practical, and supportive of long-term focus. In contrast, serif fonts are considered too formal, decorative, and more suitable for print media or decorative elements than long-term consumption of digital content.

Dark Mode Perception

Dark mode was generally positively received by respondents, especially for night use and long reading sessions. However, a successful dark mode implementation requires the right balance. Dark modes that are too dark or gloomy such as in BUCK and SVNH are considered to create a depressive and tiring atmosphere. On the other hand, the dark mode in GJKS, which is more balanced and less contrasting, is highly appreciated because it remains comfortable and supports productivity.

User Comfort and Retention Factors

Data shows that visual comfort is the main factor that determines whether users will stay on a website or leave it immediately. Respondents consistently stated that overly crowded, over-contrasting, or hard-to-read designs would cause them to immediately close the page without reading further content. On the contrary, a clean, structured, and comfortable design like GJKS makes users feel at home and want to visit the website again.

Implications for User Experience

These findings underscore the importance of a user-centered design approach in website development. While creativity and visual innovation have value, functionality and user convenience should be a top priority. Designs that support readability, intuitive navigation, and consistent experiences have proven to be more effective at maintaining user engagement than designs that emphasize only the visual aspects.

Data Analysis Process (Thematic Analysis)

The analysis is carried out using the Thematic Analysis approach by Braun and Clarke (2006) which consists of six systematic stages (Task 1 - 4):

1. **Familiarization with the Data**
   The researchers read and re-evaluated all responses from 40 respondents to four website designs in dark mode. Each design consists of two displays with serif fonts and two with sans serif. The researcher identified common impressions related to comfort, aesthetics, and readability.
2. **Generating Initial Codes**
   From the respondents' responses, repetitive initial codes were developed, such as: *"Sans serif is easier to read / cleaner", "Serif is decorative, beautiful, but tiring", "Color contrast affects focus", "Focus longer on the sans serif display", "Navigation and visual structure help comprehension".*

3. **Searching for Themes**

Table 1. Key Themes of Thematic Analysis

Theme	Quotation
Sans Serif Improves Readability & Focus	Respondents felt *that sans serif* was more neutral, not interfering with the flow of reading. GJKS (sans serif) is predominantly chosen as the most comfortable and efficient display. Perfect for long text, assignments, work, or content exploration.
Serif = Aesthetic But Not UX Friendly	BUCK and BECK are considered "creative", "aesthetic", "classic" → but *tiring*. (Serif) The design is considered "too stylish" and sacrifices readability. Many respondents suggested replacing serif fonts with sans serif.
Dark Mode Is Effective But Must Be Managed	Respondents like dark mode *if* the colors are not too dim/gloomy. GJKS (Sans Serif) has received a lot of praise for its *well-balanced* dark tones. BUCK (Serif) and SVNH (Sans Serif) are often complained about being too dark to drown the text.
Design & Layout Affects Stay/Leave Behavior	A clean and focused look (such as GJKS-Sans Serif) → increase the length of stay. Crowded layouts (BECK/BUCK-Serif) → cause "dizziness", "confusion", "close tab". The decision to leave a website is often associated with the inconvenience of reading.

Source: Theme analysis was conducted based on the *Thematic Analysis method* by Braun & Clarke (2006), as cited in Akbari et al. (2024). Participant citations (R1–R40) were taken from open-ended questionnaire responses

4. **Reviewing Themes**
   Each theme is reviewed by comparing responses across respondents. The results showed that the majority of respondents had a strong tendency on the same assessment, so the validity of the theme was quite high.
5. **Defining and Naming Themes**
   The themes found are then defined and named according to their thematic characteristics:

Table 2. Theme Definition and Naming

Theme	Theme Name	Focus
1	*Sans Serif: Functional Clarity*	Reading efficiency & visual focus
2	*Visual Fatigue due to Serif*	Beautiful but annoying serifs
3	*Dark Mode: Between Balance and Fatigue*	The importance of contrast settings
4	*Stay or Go: The Influence of Visuals on User Behavior*	UI determines engagement

Source: The theme naming process refers to the Thematic Analysis guide (Braun & Clarke, 2006) and the results of cross-validation of participant responses

6. **Producing the Report**

Each theme is narratively elaborated and supported by original quotes from respondents to show the depth of their experience and perception of the website being tested.

"GJKS (sans serif) is best for readability, solid typography. - R1"
"Sans Serif is more pleasing to the eye.- R2"

"BECK (serif) is instantly eye-catching, GJKS (sans serif) is calm and professional.- R3""The small titles in BUCK (serif) are too decorative, difficult to read.- R4"
"Dark mode helps with more focus - R5."
"BECK (serif) uses an artistic font that is less friendly to read quickly - R6."
"The GJKS (sans serif) font size fits in BUCK (serif) is a bit tiny - R7."
"The dark background is predominantly okay as long as it's not too concentrated - R8."
"The dark background really helps to keep focus, especially at night - R9."

Key Findings

Theme 1: Sans Serif Improves Readability and Focus

Respondents predominantly mentioned that the display with a sans serif font is easier to read, looks modern, and does not tire the eyes quickly.

Quotation:

- "Sans serif is more readable, especially for digital. - R1"
- "Sans serif is definitely a favorite because it's more functional. - R7"
- "Sans serif fonts are more versatile and modern. - R10"
- "Sans serif is definitely easier for me who needs to understand quickly. - R16"
- "Sans serif is always a win for reading convenience. - R23"

Discussion: In the study of Daxer et al. (2022), modern digital displays (dark mode) often require clear fonts, contrast, and minimal visual distractions. In this study, the display of SVNH and GJKS using sans serif was proven to provide an excellent understanding of details from the respondents, supporting the claim that sans serif is able to improve focus and readability in the context of dark-format websites.

Theme 2: Serif = Aesthetic But Tiring

Although it is considered attractive and elegant, serif fonts are considered tiring to read on digital screens, especially in dark mode.

Quotation:

- "Serif = artistic but tired. - R29"
- "Serif is for decoration. - R31"
- "Serifs are great for titles or print designs but not for long paragraphs on the web.- R33"
- "Serif is just for branding. - R35"
- "The serif font (BUCK) makes nostalgic but uncomfortable. - R31"

Discussion: In line with research by Daxer et al. (2022) acknowledging the advantages of sans serif for screens or interface displays, this study reinforces the notion that serifs can be aesthetically pleasing but less convenient in digital media.

Theme 3: Dark Mode = Between Cozy & Gloomy

Dark mode is praised for reducing glare and increasing contrast, but only if it is set appropriately. When the contrast is too low, the text becomes difficult to read.

Quotation:

- "The dark color in GJKS (sans serif) is okay. In BECK (serif) it is too dark sometimes.- R4"
- "Dark mode helps me focus more. - R5"
- "The best GJKS (sans serif) dark mode. BUCK (serif) is too dark. - R7"
- "It's comfortable as long as the contrast is not too high. - R9"
- "Dark mode is okay as long as the brightness is not too low. - R10"

Discussion: Although convenient, dark mode often lowers visual clarity and reading speed, especially in the context of paragraphs (Palmén et al. 2023). The results from the respondents' data also show that Dark Mode can provide good visual comfort and can improve focus with proper contrast management.

Theme 4: Visual Structure Determines the Length of User Interaction

Respondents stated that visual structure affects the decision to stay reading or leave the page immediately.
Quotation:

- "It can be very influential. Poor design can make me leave the website before even reading the content.- R40"
- "Definitely affecting. If it's too crowded like BUCK (serif), I can close the tab right away. But if it's clean like BECK (serif), I can feel at home for a long time. - R39"
- "If the design is like GJKS (sans serif), it can make a high conversion. - R37"
- "The layout is clear = I continue. Complicated layout = I'm out. - R32"
- "Clean design = user stay. - R27"

Discussion: The visual structure of a web page that includes font types, content arrangements, element positions, and supporting graphic elements plays an important role in determining how long and how effectively users interact with an interface. Tichindelean et al. (2021) in their eye tracking study found that well-structured displays, especially those that combine visual elements such as icons, short text, and contrasting colors, are able to increase the duration of user interaction and facilitate the efficient completion of tasks. In the context of this study, sans serif fonts, which are generally used in minimalist and clean designs, are proven to support information processing speed and readability in an organized layout. Thus, this type of font can extend the duration of the user's attention to important elements in the web view.

Integration of Findings and Literature

Table 3. Integration of Findings with the Literature

Aspects	Literature	Research Findings
Serif Free	Sans serif is faster to read and more accurate. By Vecino et al. (2022). *"How does serif vs sans serif typeface impact the usability of e-commerce websites?"*	Sans serif is most convenient for dark mode
Serif	Serifs are slower and tend to be visually tiring. By Vecino et al. (2022). *"How does serif vs sans serif typeface impact the usability of e-commerce websites?"*	Aesthetically pleasing but uncomfortable to read on screen
Dark mode	Dark mode may help reduce the risk of eye fatigue compared to light mode, but only if it's set appropriately. By Sengsoon & Intaruk (2025). *"Immediate Effects of Light Mode and Dark Mode Features on Visual Fatigue in Tablet Users"*	Colors that are too dark result in visual fatigue
Layout UI	A clean and visually organized layout builds trust and encourages users to stay longer in the app. By Majumder, Aaditya Shankar. (2025). *The Influence of UX Design on User Retention and Conversion Rates in Mobile Apps.*	A clean layout will have an impact on staying longer, comfortable on the eyes.

Source: The supporting literature is drawn from the studies of Vecino et al. (2022), Sengsoon & Intaruk (2025), and Majumder (2025). The "Research Findings" column refers to the results of qualitative data analysis

Additional Analysis

From Task 5 (Font) which aims *to "Know the details of fonts combined with dark mode"* regarding fonts, it was obtained that all respondents were able to answer accurately without any errors and can be interpreted based on *the point of view of Thematic Analysis*:

1. **Clarity of Information**

- Respondents had no trouble understanding textual content across all views (SVNH, GJKS, BUCK, BECK). This signifies a visual hierarchy and the use of fonts strongly supports information processing.

2. **Efficient Visual Navigation**

- Answers to questions such as "footer location," "number of doctors," or "call to action" indicate that users are able to navigate the screen efficiently, meaning that the combination of fonts and layouts supports the ease of quickly finding information.

3. **Support for Call to Action**

- The effectiveness of a *call to action* like in BUCK shows that the chosen font manages to highlight important parts without losing aesthetics.

4. **Font Compatibility with Dark Mode**

- The compatibility between the font type and dark mode greatly affects visual comfort. In SVNH and GJKS, sans serif fonts have proven to be effective on dark screens because they appear clean and minimalist. Meanwhile, in BUCK and BECK, serif fonts give an elegant impression without reducing readability. Both font types are proven to be compatible with dark mode if supported by proper contrast and layout settings.

CONCLUSION

This study shows that typographic elements and interface design have a significant effect on reading comfort in Dark Mode website displays. From the *Thematic Analysis* of the responses of 40 respondents, four main conclusions were obtained: **Sans serif** fonts are predominantly chosen because they provide higher visual comfort. Displays that use sans serif fonts are considered more modern, clean, and do not tire the eyes quickly, especially when reading for long durations. **Serif** fonts, although considered aesthetic and elegant, are viewed as interfering with readability on digital screens. Decorative details and complex lettering shapes reduce reading comfort, especially in Dark Mode. **Dark Mode** is preferred by most respondents, but its effectiveness relies heavily on setting the contrast between the background and text color. Colors that are too dark or too pale can lead to visual fatigue. **Simple**, organized, and visually non-overdone layouts and visual structures tend to increase reading duration and encourage user engagement. Conversely, a dense or element-packed design distracts concentration and causes users to leave the page more quickly.

REFERENCE

Eisfeld, H., & Kristallovich, F. (2020). The rise of Dark Mode: A qualitative study of an emerging user interface design trend [Bachelor's thesis, Jönköping University]. DiVA Portal. https://www.diva-portal.org/smash/record.jsf?pid=diva2%3A1440470

Vecino, S., Mehtali, J., de Andrés, J., Gonzalez-Rodriguez, M., & Fernandez-Lanvin, D. (2022). How does serif vs sans serif typeface impact the usability of e-commerce websites? PeerJ Computer Science, 8, e1139. https://doi.org/10.7717/peerj-cs.1139

Kushendriawan, M. A., Santoso, H. B., Putra, P. O. H., & Schrepp, M. (2021). Evaluating user experience of a mobile health application 'Halodoc' using user experience questionnaire and usability testing. Journal of Information Systems, 17(1), 58–71.

Shrestha, A., Shrestha, S., Paneru, B., Paneru, B., Paudel, S., Adhikari, A., & Sapkota, S. C. (2024). An Exploration of Effects of Dark Mode on University Students: A Human Computer Interface Analysis. arXiv preprint arXiv:2409.10895.

Suroya, S. H., Torrens, G. E., & Downs, S. T. (2024). Font Matters: Investigating the Typographical Components of Legibility. International Journal of Research and Innovation in Social Science, 8(9), 3368-3379.

Akbari T, Muljadi B, Maulana D, Pratomo R. (2024). The Role of Higher Education Leadership in Developing Human Capital and Future of Jobs In ASEAN: A Study on Indonesia's Universities. Johepal. 5(2), 36-51. doi:10.61186/johepal.5.2.36

Purnamasari, Y. (2021). The level of readability of health texts on the official WHO website during the COVID-19 pandemic. Line: Journal of Language, Literature, and Teaching, 10(2), 94–105. http://jurnal.unsur.ac.id/ajbsi

Tjahyanti, L. P. A. S., & Sutama, G. R. (2024). The influence of interface design on readability and accessibility for users with disabilities. Journal of Computer Science and Technology (KOMTEKS), 3(1), 5–9.

Rosita, D. Q. (2022). Typographic analysis of logotypes and Instagram content @souri.bkk Signature Box. Journal of Design, 9(3), 415–425. https://doi.org/10.30998/jd.v9i3.11983

Damayanti, A. A., Priharsari, D., & Tibyani. (2021). Qualitative analysis of the use of social media for micro, small, and medium enterprises (MSMEs). Journal of Information Technology Development and Computer Science, 5(8), 3316–3323. http://j-ptiik.ub.ac.id

Bingham, A. J. (2023). From data management to actionable findings: A five-phase process of qualitative data analysis. International Journal of Qualitative Methods, 22.https://doi.org/10.1177/16094069231183620

Sengsoon P, Intaruk R. Immediate Effects of Light Mode and Dark Mode Features on Visual Fatigue in Tablet Users. Int J Environ Res Public Health. 2025 Apr 12; 22(4):609. doi: 10.3390/ijerph22040609. PMID: 40283833; PMCID: PMC12027292.

Majumder, Aaditya Shankar. (2025). The Influence of UX Design on User Retention and Conversion Rates in Mobile Apps. 10.48550/arXiv.2501.13407.

Daxer, B., Radner, W., Radner, M., Benesch, T., & Ettl, A. (2022). Towards a standardisation of reading charts: Font effects on reading performance—Times New Roman with serifs versus the sans serif font Helvetica. Ophthalmic and Physiological Optics, 42(6), 1180–1186. https://doi.org/10.1111/opo.13039

Palmen, H., Gilbert, M., & Crossland, D. (2023). How bold can we be? The impact of adjusting font grade on readability in light and dark polarities. In Proceedings of the 2023 CHI Conference on Human Factors in Computing Systems (pp. 1–11). ACM. https://doi.org/10.1145/3544548.3581552

Tichindelean, M., Tichindelean, M. T., Cetină, I., & Orzan, G. (2021). A comparative eye tracking study of usability—Towards sustainable web design. Sustainability, 13(18), 10415. https://doi.org/10.3390/su131810415