

The difference in public perception of the brand name Twitter in the old version and the new version

Muhammad Redzki Nurfadillah Mukhseni^{1*}, Rendra Widyatama²

¹Communication Sciences, Ahmad Dahlan University, Yogyakarta, Indonesia

ABSTRACT

Keywords

Perception Brand Image Twitter X

In March 2023, Elon Musk changed Twitter's logo to a white X symbol on a black background, replacing the old Twitter logo, which had been a blue bird image used for 17 years. This change sparked a debate, especially since people had become familiar with Twitter's old logo and had formed a connection with the social media platform through it. In marketing communication, the brand name reflects a company's identity and creates its own perception among the audience. Changes to the brand will also alter people's perceptions of the company. This research aims to uncover the audience's perception of the old and new Twitter brand images. The research uses a quantitative approach, where the researcher collected data through an online questionnaire involving 300 active Twitter users as respondents. Data analysis used the Paired t-Test statistical method to analyze differences in perception. The research results show that there is a significant difference in perception between the old and new versions of the Twitter brand name. This is evidenced by a p-value of 0.000.

1. Introduction

DOI: 10.12928/sylection.v3i1.14017

In March 2023, the realm of social media and technology was abuzz with the controversial move made by Elon Musk. As one of the prominent figures in the technology industry, any action he takes is bound to garner significant attention. One of the recent, startling moves involved the alteration of Twitter's logo. Twitter, as a highly popular social media platform, had long used a blue bird image as its identity. This logo had been in use for 17 years and had become an icon widely recognized by Twitter users around the world.

However, in March 2023, Elon Musk decided to replace Twitter's old logo with a drastically different one. The new logo depicts a white letter X on a black background. This move surprised many people and elicited various reactions from different quarters. Some regarded this change as a refreshing and innovative step, symbolizing the spirit of change and experimentation often associated with Elon Musk. However, others perceived this change as a too radical step that disregarded Twitter's roots as a social news platform.

Elon Musk's change of Twitter's logo in March 2023 reflects the concept of strong branding. Branding involves the process of building a brand's image and identity in the minds of consumers. The logo is one of the key elements in branding as it often becomes a highly recognizable symbol to the public. In this case, Twitter had used the blue bird image logo for 17 years, and it had become a strong icon in the world of social media. Changing the logo to a white letter X on a black background is a controversial and bold move that could impact the public's perception of the Twitter brand. It demonstrates how branding can evolve over time, especially in an effort to remain relevant and catch the market's attention (Aaker, 2016).

Moreover, Twitter's logo change can be seen as a strategic move to differentiate the brand from its competitors, aligning with a core concept in branding theory, where differentiation is one of the crucial elements in constructing a robust brand image (Keller, 2013). By transitioning from the familiar blue bird logo that has been synonymous with Twitter for 17 years to a bold new design featuring a white





²Communication Sciences, Ahmad Dahlan University, Yogyakarta, Indonesia

^{*}Corresponding author's email: Muhammad1800030278@webmail.uad.ac.id

'X' against a black background, Twitter attempts to forge an entirely new and unique identity in the eyes of its users. This bold step has generated considerable discussions and stirred curiosity from the public, potentially reinforcing Twitter's standing within the highly competitive social media landscape.

However, it's essential to recognize that this controversial change is not without risks. In branding theory, brand consistency is a key component for maintaining a strong brand image (Kotler & Keller, 2018). An overly radical shift in a logo can lead to confusion among users and potentially damage the brand image built over many years. Therefore, Twitter must be prudent in managing this transformation and ensuring that the change aligns with their long-term branding objectives. Given the emotional attachment and profound recognition the former Twitter logo commanded, the ongoing debate surrounding the change underlines the extent to which logo and brand name alterations can impact the emotional connection that has developed between a brand and its consumers (Kapferer, 2018). To handle this transformation effectively, the company needs to understand how the public perceives the change and strive to strike the right balance between modernity and continuity in their brand image.

However, this controversial move also comes with risks. In branding theory, brand consistency is an essential element in maintaining a strong brand image (Kotler & Keller, 2018). Drastic logo changes can lead to confusion among users and harm the brand image built over the years. Hence, Twitter must be cautious in managing this change and ensuring that it aligns with their long-term branding goals.

The brand name plays a pivotal role in the realm of branding theory, as it serves as one of the fundamental elements that reflects a company's identity and shapes perceptions within its audience (Kapferer, 2018). Whenever a company opts to alter its brand name or logo, this modification can profoundly influence how the public perceives and comprehends the company. This is due to the fact that the brand image encapsulates the overall image, values, and emotional associations connected to the brand (Keller, 2013). Modifications to the brand name have the potential to create a new impression, which can either be perceived as refreshing and innovative or elicit adverse reactions if it fails to align with the expectations of users. Such changes in the brand name should be handled judiciously, considering the emotional resonance and preconceived notions that people hold towards a brand. Ultimately, the perception of the brand name, and its influence on users' emotions and attitudes, holds significant implications for a company's success and market positioning in the dynamic landscape of branding.

The alteration of Twitter's logo that sparked debate is a move not uncommonly faced by companies in their efforts to develop their brand. Twitter's old logo, which had become a highly recognizable icon, had formed a strong emotional bond and brand recognition among users. When the company decided to change this logo, people felt like they were losing something that had become a part of their identity. This debate reflects the extent to which changes in logos or brand names can affect the emotional bonds that have formed between a brand and its consumers (Kapferer, 2018). To handle this change effectively, the company needs to understand how the public perceives the change and strive to do so.

A study aimed at revealing the audience's perception of both the old and new versions of Twitter becomes relevant in this context. This is because public perception is an integral part of shaping a brand's image (Aaker, 2013). By identifying differences in the perception of the two versions of Twitter's brand image, this research can provide valuable insights into the impact of the brand name change on the brand's image. The research results may reveal how users perceive this change and whether it supports or damages Twitter's identity and position in the social media market.

2. Method

The type of research employed in this study is quantitative research, utilizing the survey method. Quantitative research is a scientific approach that focuses on collecting and analyzing data in numerical or statistical forms to address research questions and test hypotheses (Breakwell et al., 2016). This type of research relies on statistical approaches to depict relationships, trends, and patterns in data. Quantitative research typically involves the use of instruments such as surveys, experiments,

Volume 03, No 01, pp. 466-474

or secondary data analysis to collect data that can be analyzed using statistical software (Mills et al., 2020).

The survey method is a research approach used to collect data from respondents through prestructured questions (Fowler, 2013). Surveys can be conducted in various formats, including written questionnaires, interviews, or online surveys, and can be employed in both quantitative and qualitative research. The primary objective of the survey method is to gather representative data from the target population or a significant sample, so this data can be used to analyze the behavior, attitudes, or opinions of respondents regarding the research topic. The importance of well-designed questionnaires and appropriate sampling techniques is a key aspect of the survey method (Dillman et al., 2014). In survey research, information is collected from respondents using a questionnaire. According to Sugiyono (2017), survey research is the collection of data using a questionnaire instrument to obtain responses from respondents. Survey research aims to obtain facts about existing phenomena and seeks factual information without investigating why these phenomena exist.

The respondents in this study are 300 Twitter users. The data collection method used a questionnaire distributed online via Google Forms. Data analysis utilized a paired t-test to analyze the differences in public perceptions. The paired t-test is a statistical method used to compare two related or paired measurement groups taken from the same subjects at two different times or conditions (Newbold et al., 2017). This test is useful for determining whether there is a significant difference between the means of two paired data groups. Paired data is generally used to measure changes before and after an intervention or to compare two tests performed on the same subjects (Daniel et al., 2017).

The paired t-test is a valuable statistical tool for comparing two related data groups in the context of data analysis. In this test, each member of the first group has a corresponding partner in the second group, and the differences between these paired data are analyzed. This test is often used in various fields, such as health sciences to assess the effectiveness of a treatment on patients before and after treatment or in scientific experiments to compare results before and after a specific treatment on the same subjects (Moore et al., 2017). The results of this test can provide information on whether the observed differences between two data groups are statistically significant or simply random events (Ghozali, 2018).

3. Result and Discussion

Respondent Characteristics can be observed in the following table:

Characteristics	Category	N	%
Gender	Male	128	43%
	Female	172	57%
	Total	300	100%
Eduication	Junior HS	7	2
	Senior HS	114	38
	Diploma	25	8
	Bachelor's Degree	134	45
	Master's/Ph.D.	20	7
	Total	300	100%

Table 1. Respondent Characteristics

Table 1. provides a comprehensive overview of the characteristics of the respondents participating in this study. The characteristics are divided into two primary categories: "Gender" and "Education," allowing for a detailed analysis of the composition of the participant pool.

In terms of gender distribution, the data reflects that 43% of the respondents are male, while 57% are female. This balanced representation contributes to a more holistic perspective, ensuring that both male and female viewpoints are adequately considered.

The education category offers insights into the educational backgrounds of the respondents. It is evident that a diverse range of educational levels is represented within the sample. For instance, 2%

of respondents have completed their education up to the Junior High School level, while 38% have attained a Senior High School qualification. A further 8% possess a Diploma, 45% have achieved a Bachelor's Degree, and 7% hold a Master's or Ph.D. degree. This diversity in educational backgrounds enriches the study, allowing for a comprehensive exploration of the research topic.

Result

Prior to conducting a descriptive analysis, a mean test will be performed to determine the response interval of the participants to the questionnaire created for this research. The mean interval test for finding intervals can be calculated using the following formula: (Sugiyono, 2017).

Interval=
$$\frac{\max score - \min score}{total \ of \ alternative \ answers}$$
$$= \frac{5-1}{5} = 0.80$$

Once the interval range is determined, the categories are defined as follows:

- 1.00-1.80: Very Negative
- 1.81-2.60: Negative
- 2.61-3.40: Slightly Negative
- 3.41-4.80: Positive
- 4.81-5.00: Very Positive

Based on the table of descriptive statistics and the average value test, the following conclusions can be drawn:

Table 2. Users' Perception of the Old Twitter Logo

No.	Pernyataan	Mean	Kategori
1	I used Twitter when Twitter was using the old	3,83	Positive
	logo.		
2	I liked Twitter when Twitter was using the old	3,96	Positive
	logo.		
3	I understand the meaning of the old Twitter logo.	3,61	Positive
4	I comprehend the meaning of the old Twitter logo.	3,57	Positive
5	My assessment of the old Twitter logo	3,85	Positive
6	I have a negative assessment of the old Twitter	2,21	Negative
	logo.		
7	The old version of the Twitter logo reflects the	3,86	Positive
	values or purpose of this platform		
8	Your opinion on the name "Twitter" as the name	4,01	Positive
	of the social media platform.		
9	The name "Twitter" is suitable for the primary	4,05	Positive
	concept or function of this platform		
	Total	32.95	
	Mean	3,66	Positif

Source: Data Processing Results, 2023

Based on Table 2, it can be observed that users' perceptions of the old Twitter logo are categorized as positive, with a mean value of 3.66. The results from Table 2 indicate that users generally held a positive perception of the old Twitter logo. The mean value of 3.66 falls within the "Positive" category, suggesting that, on average, respondents viewed the old logo favorably. This positive perception is crucial as a logo plays a significant role in representing a brand's identity and shaping how users connect with it. When users have a positive perception of a logo, it can contribute to a stronger emotional connection between the brand and its audience, potentially enhancing brand loyalty and engagement.

A mean value of 3.66 also implies that most respondents evaluated the old Twitter logo above the midpoint on the scale, indicating that it had a considerable degree of significance to them. This suggests that the old logo held an essential place in the minds of the users. The positive perception may be attributed to the familiarity of the logo, as it had been in use for a long time, becoming an iconic representation of the Twitter platform. However, it's worth noting that while the mean suggests a positive view on average, there may still be variations in individual opinions, and further analysis could explore the reasons behind these perceptions and whether they relate to specific demographic or usage patterns among the respondents.

Table 3. Users' Perception of the New Twitter Logo

No.	Pernyataan	Mean	Kategori
1	I used Twitter when Twitter was using the new	2,85	Slightly
	logo.		Negative
2	I liked Twitter when Twitter was using the new	2,53	Slightly
	logo.		Negative
3	I understand the meaning of the new Twitter logo.	2,38	Slightly
			Negative
4	I comprehend the meaning of the new Twitter	2,40	Slightly
	logo.		Negative
5	My assessment of the new Twitter logo	2,75	Slightly
			Negative
6	I have a negative assessment of the new Twitter	2,76	Slightly
	logo.		Negative
7	The new version of the Twitter logo reflects the	2,46	Negatif
	values or purpose of this platform		
8	Your opinion on the name "Twitter" as the name	3,15	Slightly
	of the social media platform.		Negative
9	The name "Twitter" is suitable for the primary	2,62	Slightly
	concept or function of this platform		Negative
	Total	23.89	
	Mean	2,65	Slightly
			Negative

Source: Data Processing Results, 2023

Based on Table 3, it is evident that users' perceptions of the new Twitter logo are categorized as somewhat negative, with a mean value of 2.65. This finding implies that, on average, respondents held a less favorable view of the new logo. The introduction of a new logo can be a delicate matter for well-established brands, especially when the old logo has garnered strong recognition and a positive association. In this case, it seems that the change in the Twitter logo did not resonate as positively with the user base. This shift towards a somewhat negative perception might raise questions about the reasons behind this response and the potential implications for Twitter as a social media platform.

The mean value of 2.65 suggests that the new logo's reception falls below the midpoint on the scale, indicating that it had limited appeal to respondents on average. It is important for a brand to consider how such changes may affect user engagement, brand loyalty, and overall user experience. Further analysis could delve into the specific aspects of the new logo design that users found less appealing and whether these perceptions correlate with certain demographic or usage characteristics among the respondents. Understanding the reasons behind this somewhat negative perception could guide Twitter in fine-tuning its brand identity and design choices to better align with user expectations and preferences.

Pair 1

Table 4. Independent-t test				
Mean	t	P value		
Users' Perception of the Old Twitter	15.028	0.000		

Logo
Users' Perception of the New Twitter

Logo

Source: Data Processing Results, 2023

The results of the test reveal that the p-value is 0.000, which is less than the significance level of 0.05. This indicates a statistically significant difference in user perceptions between the old and new Twitter logos. In other words, the change in the logo design has had a notable impact on how users perceive the Twitter brand.

A p-value below the significance level suggests that the observed differences are not likely due to random chance but rather point to a real and meaningful shift in user perceptions. This finding underscores the importance of logo design as a fundamental aspect of brand identity. Companies must consider how changes in logo design can influence user perceptions and, by extension, their relationship with the brand. Further analysis could explore the specific aspects of the old and new logos that contributed to this significant difference, shedding light on the elements that resonate positively or negatively with users. Understanding these nuances is vital for brand management and ensuring that design changes align with the brand's objectives and user preferences.

Discussion

Based on Table 1, it can be observed that users' perceptions of the old Twitter logo are categorized as positive, with a mean value of 3.66. In contrast, users' perceptions of the new Twitter logo are categorized as somewhat negative, with a mean value of 2.65. This research underscores the significance of branding in the business and social communication realms. Users' positive perceptions of the old Twitter logo, with an average score of 3.66, indicate that the logo had successfully established a positive relationship with users. This aligns with branding theory, which posits that a strong brand can create emotional connections and positive perceptions among consumers (Keller, 2018). However, the results indicating somewhat negative perceptions of the new Twitter logo, with an average score of 2.65, reveal the challenges associated with altering well-established brand elements. Branding theory also emphasizes the importance of consistency in brand management, as overly drastic changes can confuse and erode consumer trust (Aaker, 2013).

Changing a logo within the context of an established brand, such as Twitter, presents complex challenges. While changes may be necessary to refresh a brand's image, results indicating somewhat negative perceptions of the new Twitter logo with an average score of 2.65 underscore the importance of striking a balance between innovation and consumer loyalty. Branding theory emphasizes that brand success relies on consistent brand management (Aaker, 2013). Drastic changes in brand identity elements, such as logos, can perplex users and undermine their trust. Therefore, companies need to be cautious in designing changes that reflect brand evolution without eliminating defining elements. They should also carefully consider how these changes will be received by their target audience (Upshaw, 2015).

Furthermore, these results highlight the importance of data measurement and analysis in brand management. The presence of empirical data supporting user perceptions of brand changes, as described in this study, can help companies make more informed decisions regarding the design of new brand identities or other modifications (Keller, 2013). Consumer involvement in the brand change process is also a key factor in minimizing negative impacts (Smith et al., 2016). These findings offer deeper insights into how changes in brand elements like logos can affect user perceptions. It suggests that a well-recognized logo has a significant impact on consumer perceptions of a brand (Keller, 2018). Therefore, companies must exercise caution when making changes to their brand elements and consider their impact on user relationships.

The results of this study also indicate that users have a more positive perception of the well-known Twitter logo, with an average score of 3.66. This aligns with branding theory, which emphasizes the

importance of building a strong and consistent brand. The theory asserts that a strong brand can create emotional connections and positive perceptions among consumers (Keller, 2018). The old Twitter logo may have successfully built a strong image and identity in the eyes of users, making them feel comfortable and emotionally connected to the logo.

Changing brand elements is an important strategic step for companies to maintain the relevance and appeal of their brand in an ever-changing market. However, the decision to change brand elements, such as logos, must be made carefully and thoughtfully. One theory supporting this importance is the Brand Identity Theory introduced by Aaker (2013). This theory highlights that brand elements like logos, images, and messages are integral parts of the brand identity that shape consumer perceptions of the brand. When companies decide to make changes to these elements, they should be aware that it can affect how consumers see, feel, and interact with the brand. Therefore, changes should be directed toward strengthening and preserving existing values, rather than damaging the relationships that have been built.

Furthermore, the concept of Trust-Driven Brand Equity is relevant in this context. This theory emphasizes that trust is a valuable asset in building brand equity (Srinivasan et al., 2017). When a company makes changes to brand elements, such as logos, there is the potential to undermine consumer trust. Consumers may wonder why the company is making these changes and whether they will have a negative impact on the products or services they enjoy. Therefore, companies need to consider how these changes will affect consumer trust and strive to maintain or even enhance existing levels of trust.

Changes in brand elements must also be understood in the context of managing consumer expectations. Changes in brand elements, such as logos or brand images, play a crucial role in managing consumer expectations. Consumers have specific expectations of brands they have known and used before. When companies make changes to brand elements, they must also ensure that communication to consumers about these changes is clear and transparent (Keller, 2013). This allows consumers to understand the reasons behind the changes and prepare for the upcoming changes. If consumer expectations are not well managed in the context of brand changes, it can affect their perception of the brand and, in some cases, reduce consumer trust and loyalty. Therefore, companies need to have effective communication strategies to mitigate the potential negative impact of brand changes. The Expectation Management Theory (Morsing & Schultz, 2016) highlights the importance of communicating clearly to consumers about the reasons and benefits of brand changes. By communicating effectively, companies can help consumers understand the objectives of these changes, reduce uncertainty, and manage their expectations. This can help maintain a positive relationship with consumers during periods of brand change.

The test results show a significance value of 0.000 < 0.05, meaning there is a significant difference in user perceptions between the old and new Twitter logos. This has important implications in the context of marketing communication. The change in the Twitter logo has successfully captured users' attention and made them feel a difference in how they perceive the brand. This underscores Twitter's success in effectively communicating to consumers about the changes they are making. In the marketing communication framework, this emphasizes the importance of clear and transparent messages when companies make significant changes to their brand elements (Keller, 2018). The successful change in the Twitter logo has captured users' attention and created a sense of difference in their brand perception, signifying a significant achievement in brand communication. This reflects Twitter's ability to manage brand transitions effectively and communicate the purposes and benefits of their changes effectively. Studies on brand identity changes often emphasize the importance of creating consumer engagement and brand awareness in the change process (Smith et al., 2016). When users feel involved in the brand refreshment process and have a clear understanding of the reasons behind it, they are more likely to accept and even embrace the changes. Effective communication can facilitate this process, creating a more positive brand transition experience for consumers.

These results also reflect that logo changes can be part of an effective marketing communication strategy to revitalize a brand. Companies often choose to alter brand elements, like logos, to follow the latest trends or adapt to market changes. These findings indicate that such changes can have a significant impact on user perceptions, and when done correctly, they can rejuvenate the brand's image and bring it back into consumers' focus. This aligns with the concept that brand elements can act as

powerful communication tools influencing consumer perceptions (Aaker, 2013). Consumer perceptions are also influenced by psychological and emotional factors. Consumer psychology theories, as outlined by Solomon (2016), explain how individuals make consumer decisions based on motivation, learning, and emotions. Therefore, understanding consumer motivations and emotions is crucial in comprehending how they will perceive a particular product or brand. Understanding the differences in consumer perceptions among various target groups can also be key in developing relevant and effective marketing strategies (Kotler and Armstrong, 2016).

In the realm of marketing communication, it is imperative for companies to go beyond merely altering their brand elements; they must also master the art of effective communication with consumers regarding the motivations and advantages of these changes. This communication is instrumental in helping consumers comprehend the rationale behind these alterations and can significantly bolster their acceptance of such transformations. In today's rapidly changing business landscape, modifications to brand identity components, including logos, have become a common occurrence. Yet, it is paramount for companies to not only enact these changes but also to engage in transparent and compelling communication with consumers, elucidating the objectives and merits of such transitions (Kapferer, 2018).

It is worth noting that brand transformations, if not coupled with lucid communication, can leave consumers in a state of confusion and skepticism. The consequences of brand changes are more profound than the alteration of mere visual symbols; they extend to the realm of consumer trust and loyalty. Thus, effective communication during these transformative periods becomes a linchpin in preserving and enhancing brand-customer relationships. This study underscores that changes in brand identity are not to be taken lightly, and the way companies navigate these changes, both in terms of design and communication, can make a substantial difference in the perception of their brands.

4. Conclusion

The research results indicate that users' perceptions of the old Twitter logo are categorized as positive with a mean of 3.66, while users' perceptions of the new Twitter logo are categorized as somewhat negative with a mean of 2.65. There is a significant difference in users' perceptions of the old and new Twitter logos, with a significance value of 0.000<0.05.

The implications of this research are that companies must carefully consider changes to their brand identity design, as these changes can significantly impact user perceptions and the brand image. Moreover, these findings underscore the importance of data analysis in making effective design and marketing decisions and how user responses can influence the success of brand changes. It's crucial for companies to recognize the power of brand elements and their impact on user perceptions and to employ data-driven decision-making to navigate the complex landscape of brand identity changes. Additionally, maintaining transparency and engaging with users during the transition is essential in building trust and ensuring a smooth brand transformation process. This study demonstrates the significance of brand identity in shaping user perceptions and the need for strategic management of brand changes to achieve a positive impact on brand equity.

5. Acknowledgement

The expression of gratitude is extended to the Supervisor, Rendra Widyatama, S.IP., M.Si., Ph.D., who has provided guidance until this research has been successfully completed.

6. References

Aaker, D. A. (2016). Building Strong Brands. The Free Press.

Keller, K. L. (2013). Strategic Brand Management: Building, Measuring, and Managing Brand Equity. Pearson Education.

Kotler, P., & Keller, K. L. (2016). Marketing Management. Pearson Prentice Hall.

Aaker, D. A. (2013). Dimensions of brand personality. Journal of Marketing Research, 34(3), 347-356.

- Kapferer, J. N. (2018). The New Strategic Brand Management: Advanced Insights and Strategic Thinking. Kogan Page.
- Keller, K. L. (2018). Strategic brand management: Building, measuring, and managing brand equity. Pearson Prentice Hall.
- Srinivasan, S., Anderson, R., & Ponnavolu, K. (2017). Trust-driven brand equity. Journal of Marketing, 81(1), 32-49
- Morsing, M., & Schultz, M. (2016). Corporate branding in the post-Enron era. Corporate Communications: An International Journal, 11(2), 162-181.
- Newbold, P., Carlson, W. L., & Thorne, B. (2017). Statistics for Business and Economics. Pearson.
- Daniel, W. W., & Cross, C. L. (2018). Biostatistics: A Foundation for Analysis in the Health Sciences. Wiley.
- Moore, D. S., McCabe, G. P., & Craig, B. A. (2017). Introduction to the Practice of Statistics. W. H. Freeman.
- Ghozali, Imam. 2018. Aplikasi Analisis Multivariate dengan Program IBM SPSS 25. Badan Penerbit Universitas Diponegoro: Semarang.
- Sugiyono. (2017). Metode Penelitian Kuantitatif, Kualitatif, dan R&D. Bandung: Alfabeta, CV.
- Smith, A. N., Fischer, E., & Yongjian, C. (2016). How does brand-related user-generated content differ across YouTube, Facebook, and Twitter? Journal of Interactive Marketing, 26(2), 102-113.
- Upshaw, L. B. (2016). A consumer-oriented framework for brand equity and loyalty. Journal of the Academy of Marketing Science, 23(3), 158-168.
- Solomon, M. R. (2016). Consumer Behavior: Buying, Having, and Being. Pearson.
- Kotler, P., & Armstrong, G. (2016). Principles of Marketing. Pearson.
- Breakwell, G. M., Hammond, S., Fife-Schaw, C., & Smith, J. A. (2016). Research Methods in Psychology. SAGE Publications.
- Mills, G. E., Durepos, G., & Wiebe, E. (2020). Encyclopedia of Case Study Research. SAGE Publications.
- Fowler, F. J. (2013). Survey Research Methods. SAGE Publications.
- Dillman, D. A., Smyth, J. D., & Christian, L. M. (2014). Internet, Phone, Mail, and Mixed-Mode Surveys: The Tailored Design Method. John Wiley & Sons.