

## Exploring the impact of Instagram like visibility on self-confidence

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### ABSTRACT

**Background:** Instagram allegedly hid the number of likes due to its alleged negative effect. However, it now allows users to choose their visibility settings. Users can either hide or show the number of likes, which has become a conversation topic among users. Some users responded positively, while others had less favorable responses. Moreover, because they consider the “like” feature one of Instagram’s key differentiators, some users hide the number of likes while others continue to display them. **Purpose:** This study explores users’ choices in configuring Instagram-like settings and their underlying motivations. Additionally, the study also examines the role of Instagram-Likes in boosting self-confidence. **Method:** This research used a quantitative descriptive method involving 703 students from the Communication Science Study Program at Halu Oleo University, Indonesia. The sample consisted of 70 individuals aged 18 to 24. The data analysis used descriptive statistics to provide a general overview of each variable, displayed with a frequency chart. Researchers also used qualitative data for comparative purposes to enhance research results. **Result:** Most respondents chose to indicate the number of likes, categorizing their motives into neutral, positive, and negative categories. Instagram likes are a relatively insignificant aspect of life. On the positive side, they can offer benefits to users, such as validation and recognition. Conversely, flaunting one’s likes can be viewed as seeking validation or showing off. It is worth noting that some individuals who conceal the visibility of likes do so to safeguard their self-esteem and mental well-being. Another finding from this study is that Instagram-Like can strengthen their self-confidence. **Conclusion:** Instagram users have complete control over the Instagram-like options that allow them to hide their like count or not. Instagram-Like can increase self-confidence. The consideration of ‘likes’ as a manifestation of praise, appreciation, acceptance, admiration, and love from others is a prevailing sentiment among individuals. **Implication:** The researchers expect this research will provide new insights into using social media wisely for positive mental health.

**Keywords:** Instagram-like; impact of Instagram; number of like; self-confidence; like setting

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## INTRODUCTION

The use of social media for communication is a global trend, even in developing countries such as Indonesia. Social media apps have become integral to daily life for most individuals worldwide (Seifert et al., 2023). People spend most of their free time visiting online social networks (Heimbach & Hinz, 2018). Social media has rapidly evolved into an essential promotional tool in the business realm (Kunja & GVRK, 2020). In the age of information technology, social media plays a significant role in communication and forms social networks (Yum, 2023). The development of social media has shifted people's attention from newspapers to popular social media platforms (Fadhli et al., 2023).

Instagram is one of the most popular social media platforms in the world. Since its introduction, Instagram has experienced remarkable growth and has secured a spot among the world's top social networking platforms (Boy & Uitermark, 2017; Vraga et al., 2020). Instagram boasts a vast user base with an engagement rate ten times higher than Facebook's and thirty times higher than Twitter's (Seifert et al., 2023). The most widely used social media on smartphones among teenagers include YouTube, Snapchat, Twitter, Instagram, and Facebook (Ayoub et al., 2023). The three most frequently accessed social media platforms are Facebook, Twitter, and Instagram (Skidmore et al., 2023).

Instagram is a practical and sophisticated

social media platform, making it highly sought after by many people. Since 2012, Instagram has allowed users to share photos and videos on Android and iOS platforms (Aljabri et al., 2023). Uploading a post on Instagram using hashtags can provide users with new knowledge (Talbot et al., 2023). Instagram appeals to users because it enables them to express themselves through photos and short videos (Wallace & Buil, 2021). It also possesses the power of storytelling (Teresa et al., 2019). Generally, influencers on Instagram often share content in images or videos enriched with embedded content and text descriptions (Sokolova & Kefi, 2020).

The like feature is a supporting feature that can provide feedback directly to users. Many social media platforms now allow users to give positive feedback on other people's photos and videos by clicking the "like" button on the content (Dumas et al., 2020). On Instagram, users can like and comment on other people's posts. Instagram also displays the number of 'likes' received by a piece of content (Mena et al., 2020). Factors such as the number of likes, post time, and text length all influence user responses (Wilson et al., 2018). In the digital age, it is prevalent for people to express their preferences by pressing the Like button (Thömmes & Hübner, 2018).

The like feature aims to show kindness to others and maintain good relationships. Instagram users can stay connected with their friends by giving likes and leaving a comment

on their posts (Yau & Reich, 2019). Clicking the “like” button and leaving a comment can increase awareness and engagement among users to make a positive contribution (Kim & Kim, 2020). The “like” button allows users to express emotions like love and laughter (Larsson, 2018). The “Like” button signifies a positive response (Meseguer-Martinez et al., 2017). In recent years, the “Like” button on social media has become incredibly popular. This feature provides measurable feedback because the number of “Likes” is easy to quantify and count (Li et al., 2018).

Nevertheless, the like feature can exert pressure on users. If a person does not obtain “Likes” on social media, it can threaten their feeling of ownership and self-esteem (Reich et al., 2018). The quest for predictable likes can erode feelings over time (Dumas et al., 2020). Clicking the “Like” button is often not driven by enjoyment of the content shared but rather by a perceived moral responsibility to like what a friend posts (Xu et al., 2020). Striving to accumulate as many “Likes” as possible can burden individuals and subject them to social pressure (Ross, 2019).

Receiving a few likes on Instagram can have an impact on mental health. Seeking “Likes” can be considered a health-risky behavior associated with adverse outcomes, including risky health behaviors (Wallace & Buil, 2023). Few likes can negatively affect video production (Meseguer-Martinez et al., 2017). Research has proven that those who engage in cyberbullying

on social media tend to receive fewer likes on their posts (Can & Alatas, 2019).

In some cases, when the number of likes is high, users tend to exhibit narcissistic behavior. Along with increased social network usage, there has been a significant increase in narcissism rates among Millennials (Bergman et al., 2011). Receiving excessive likes can contribute to narcissism (Wallace & Buil, 2023).

Instagram users often seek validation and compare themselves to others based on the number of likes. Giving “Likes” on Instagram increases appearance comparison and dissatisfaction (Tiggemann et al., 2018). The number of “Likes” can lead to social comparison with others (Chua & Chang, 2016), particularly in the context of facial appearance dissatisfaction (Cohen et al., 2018).

Users become obsessed with popularity, and teens often set a minimum threshold for the number of “Likes” required to be considered popular on Instagram (Yau & Reich, 2019). “Likes,” comments, and shares can serve as secondary indicators in determining popularity and influence in communication (Bolaji, 2023). There is a positive correlation between the number of “Likes” and the number of followers (fans) (Liu et al., 2023).

In Indonesia, the Instagram-like feature is essential for marketers or companies as it helps measure audience engagement on social media. In Indonesia, research conducted by Islahwati and Wibowo (2020) states that likes and comments represent online engagement. A

high number of “likes” on a post can indicate attractive content, potentially leading to more “likes” and increased brand information dissemination to potential customers. Regarding that, Fatanti and Suyadnya (2015) stated that the like feature is one of the exciting features on Instagram because tour operators can use it to promote tourist destinations. Moreover, Azmi and Budi (2018) stated that the Instagram-like feature could be used as an indicator to measure the engagement rate in Indonesian Government Ministries. Furthermore, according to Primasiwi et al. (2021), the like feature is considered one of the essential key performance metrics in digital marketing. Although research in Indonesia has primarily focused on the business and marketing aspects of the ‘like’ feature, limited research analyzes its psychological impact on mental health.

Instagram allows users to manage their Instagram-like settings, allowing them to hide or display the number of likes received. Instagram experimented by hiding the “Likes,” making it visible only to the content creator and not to their followers (Wallace & Buil, 2021). Content creators have traditionally sought to increase the number of likes, but Instagram has changed its algorithm to hide the ‘likes’ (Duffy et al., 2021). The visibility of the Instagram-like count often leads to comparisons and even competition with others (Li et al., 2018).

Therefore, this study aimed to explore how users display their Instagram-like. Instagram serves as an intervention source (Carlyle et

al., 2018) and the World Health Organization’s (WHO. Social media platforms like Instagram exert limited control over the posts individuals share with their followers (Djafarova & Trofimenko, 2019). Instagram provides a slight content limit in uploading information, links, photos, and videos (Subramani et al., 2023).

This research is essential to determine the users’ choices in displaying their Instagram likes and the motivation behind those choices. The study also delves into the use of Instagram likes to enhance mental health, particularly in boosting self-confidence. Many questions remain unanswered regarding the impact of hiding the number of “Likes” on users’ well-being (Carlyle et al., 2018) and the World Health Organization’s (WHO. Self-confidence can be necessary for cybersecurity awareness (Childers et al., 2023), as it stems from individuals’ belief in their abilities and their understanding of their surroundings (Kiverstein et al., 2019).

## RESEARCH METHOD

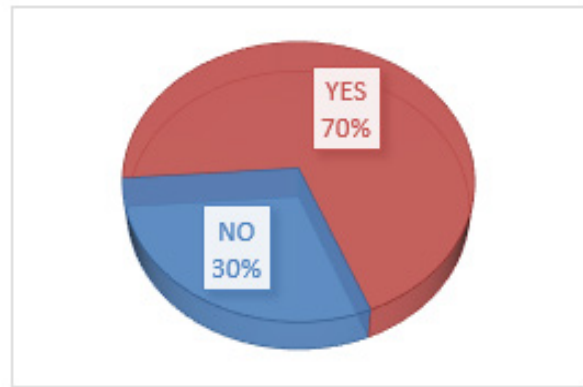
This study used a quantitative descriptive approach (Parra et al., 2022) by distributing questionnaires. The population comprised students from the Communication Science Faculty of Social Sciences at Halu Oleo University, Indonesia. The participants were 18-24 years old and belonged to the classes of 2019, 2020, 2021, and 2022. Based on research from (*Instagram Users in Indonesia - January 2023 | NapoleonCat*, n.d.), most Instagram users fell within that age range. As a result,

the population consisted of 703 students from the Communication Science Department. The number of students in the class of 2019 was 166; there were 177 students in the class of 2020, 175 students in 2021 and 185 students in 2022. The sampling method involved selecting 10% of the total population. This method is applicable when the population exceeds 100 (Arikunto, 2017). It used the sampling formula, where  $10\% \cdot 703 = 70.3$ , which we round down to 70 Respondents. The number of respondents for the Class of 2019 was 17 students, the Class of 2020 was 18 students, the Class of 2021 was 17 students, and the Class of 2022 was 18.

In this study, the researchers analyzed the data using descriptive statistics with a frequency distribution table. Descriptive statistical analysis is suitable when the primary goal is to describe the general overview of the research variable—achieving general overview involved examining the data's frequency distribution, which one could present as a frequency distribution table or histogram. The researcher also interviewed for qualitative data, which were then compared with the analyzed data to enhance the overall results. Qualitative data were narratively interpreted (Novack et al., 2023).

## RESULTS AND DISCUSSION

In this study, the researchers collected data by conducting a survey. Respondents answered several questions from the questionnaire distributed. Then, the researchers collected



Source: Author's review, 2023

**Figure 1** Most respondents are aware of changes in Instagram-Like settings

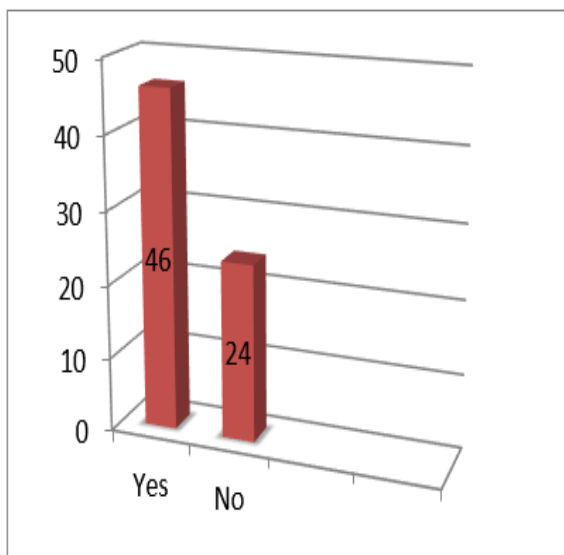
qualitative data in the form of interviews with several respondents, which could be used as a comparison to complete the results of data analysis (Hafiar et al., 2020).

The results showed that 70% of respondents, or equivalent to 49 respondents, knew of changes in settings on Instagram-Like. In comparison, the other 30% (21 respondents) did not know, as illustrated in the following Figure 1.

The data above shows that most respondents know the new Instagram-like settings. Therefore, in this study, only 30 percent of respondents needed to learn about the new Instagram-like settings. The data indicated that 46 respondents did not hide the number of Instagram Likes, while 24 others chose to hide it, as presented in Figure 2.

Figure 2 demonstrated that more respondents should have hidden the number of Instagram Likes in this study. There is a wide range of differences in numbers between respondents who do not hide and respondents





Source: Author’s review, 2023

**Figure 2 Respondents’ choice to hide or not hide Instagram-Likes**

who do.

The interviews with several respondents found several reasons why respondents hid the number of likes, as listed in Table 1.

Some of the respondents’ reasons described in Table 1 above show that they have an urge to take care of themselves and avoid situations

**Table 1 Reasons for hiding the number of likes**

No.	Reason
1	Privacy: Respondents do not want others to see the number of likes received and who likes their posts.
2	Feeling more comfortable
3	Feeling as if one is constantly receiving only a few likes.
4	It is easy to feel insecure.
5	Users use Instagram solely as a photo album, not for validation.
6	Avoid fake-likes

Source: Author’s review, 2023

**Tabel 2 The reason for not hiding the number of likes**

No	Reason
1	It is not a big deal to display the number of Instagram-likes.
2	It is a form of confidence in the uploaded content, regardless of the small number of likes
3	Some respondents needed to be made aware that they can hide Instagram-like can.
4	Some respondents needed to be more active to change Instagram-like settings.
5	They want to gauge the quality of their uploaded content.
6	To show others the number of likes they have.
7	User should not hide their Instagram-Like.

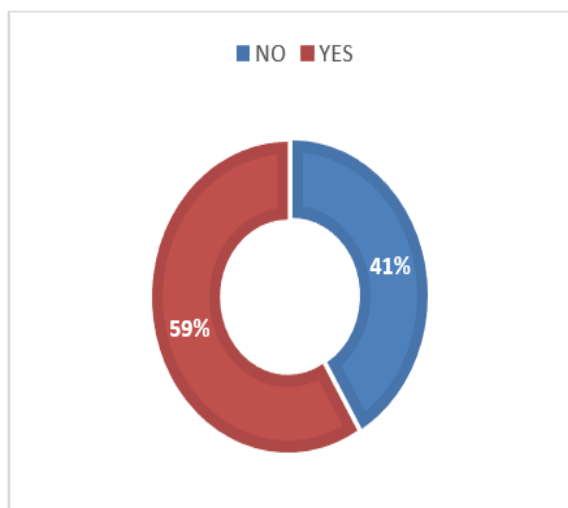
Source: Author’s review, 2023

that make them uncomfortable.

The following are the results of interviews with several respondents regarding the reasons for not hiding the number of likes (Table 2).

Meanwhile, in Table 2, the reasons given by users who do not hide the number of likes are interesting because some consider that the like feature has significant benefits for them. On the other hand, others think the like feature is unimportant, so they feel there is no need to hide it.

The researchers asked respondents whether Instagram-Likes can bolster their self-confidence. 41 respondents (59%) admitted that Instagram-Like reinforces their Confidence. Another 29 respondents (41%) said Instagram



Source: Author’s review, 2023

**Figure 3 Respondents' choice that Instagram-Like improves self-confidence**

likes did not provide support to their Confidence, as presented in Figure 3.

Figure 3 above shows that some respondents in this study stated that the like feature could increase their self-confidence.

Qualitative data were collected by interviewing several respondents regarding the number of Instagram likes that can increase self-confidence. The following are several respondents’ reasons (Table 3).

The reasons listed in Table 3 indicate that the like feature can fulfill human emotional needs, such as attention, feeling loved, appreciated, accepted, and recognized so that these feelings can increase one’s confidence level. The reasons put forward come from respondents who hide the number of likes and respondents who do not hide the number of likes.

Researchers also took qualitative data by interviewing several respondents, and they said that the number of Instagram likes did

**Tabel 3 Reasons that Instagram-Like can reinforce confidence**

No	Reason
1	Like complements the uploaded content, such as quality, interest, goodness, and beauty.
2	Instagram-Like is a form of support and appreciation so that users are confident to post more content.
3	It provides satisfaction, such as a sense of pleasure and pride.
4	Getting likes is a form of being loved and liked by others.
5	Instagram-Like represents someone else's attention toward us.
6	A high number of likes means that many people see our uploaded content.
7	Instagram-like can be a way of agreeing with the uploaded content.
8	Instagram-Like signifies being recognized and respected.

Source: Author’s review, 2023

not increase their self-confidence, as shown in Table 4.

Table 4 shows some reasons why the like feature does not strengthen self-confidence, indicating that respondents consider Instagram not a personal part of their lives and that Instagram-like is an ordinary feature with no significant influence.

In this research, the researchers also aimed to determine if respondents had ever felt dissatisfied with the number of likes for their posts. As a result, 34 respondents (48.57%) expressed dissatisfaction with the number of likes obtained, while 36 respondents (51.43%) reported that they never felt dissatisfied. This data indicated that in this study, the majority of

**Tabel 4 Reasons that Instagram-Like can not reinforce confidence**

No.	Reason
1	Daring to upload content signifies confidence.
2	Instagram-Like is just a regular feature.
3	Instagram is used solely for work purpose
4	The purpose of uploading content is solely to share information.
5	Rarely uploading content.
6	Feeling like someone who is not an Instagram celebrity or influencer requiring the like feature.
7	Getting likes does not necessarily mean being liked; it could be a fake like, accidental press, or just social bonds.

Source: Author’s review, 2023

respondents never experienced dissatisfaction with the number of likes they received. However, the difference between the number of those who feel dissatisfied and those who feel satisfied is insignificant. The data indicated that in this study, most respondents never experienced dissatisfaction with the number of likes they received. However, the difference between the number of those who feel dissatisfied and those who feel satisfied is insignificant.

In April 2019, Instagram tried removing the number of likes. Users who upload photos/videos can still see the number of likes received, but it remains hidden from the public eye due to the global concern regarding the effects of social media on mental health. Several studies have noted a significant link between adolescent social media use and depression and have

advised parents to monitor their teens’ social media use to maintain their mental health (Ivie et al., 2020). The issue of social media use has attracted much attention (Peng & Liao, 2023).

Most respondents in this study were aware of the number of likes. Some reasons classify as neutral, considering Instagram a standard feature without significantly impacting life. For example, Instagram-Likes are not a big deal, and they are lazy to change Instagram settings; Instagram-Like is not private, and they need to learn how to hide Instagram-Likes. It proves that Instagram is not a big concern in their lives. Standard features in social media are comments and likes (Li et al., 2018).

The positive group says that the number of Likes provides an advantage. In the context of online responses, the ‘Like’ button is considered a sign of an emotionally positive response (Meseguer-Martinez et al., 2017). For example, Instagram-Like can provide Confidence, and the number of likes can evaluate the quality of the content uploaded. Considerably, the number of likes provides more measurable feedback than comments (Li et al., 2018).

Meanwhile, others can see that the number of likes they have can have positive and negative aspects. Those aspiring to become content creators, Instagram celebrities, or influencers must display the number of likes because it can generate income for them. Influencers often assess potential followers based on the number of likes and comments they receive on their posts (Pilime & Jewett, 2023). Likes serve as a form of social



currency, and the number of Likes received represents a measurable and visible form of “positive interaction information” (Wallace & Buil, 2023). Conversely, it can come across as showing off and seeking validation. Compared to offline situations, online interactions, such as giving ‘likes’ to social media posts, provide a more extensive form of social validation (Mena et al., 2020).

Respondents who choose to hide the count of likes do so as a means of self-protection. Self-protection is intended to avoid negative things that can disturb the mind and soul. A disturbed psyche can certainly damage mental health. Some of these reasons, such as the number of likes, are privacy, personal comfort, avoiding insecurity, avoiding validation searches, covering up a few likes, and avoiding fake likes from other accounts. Information privacy awareness can be interpreted as a person’s ability to understand potential privacy threats (Soumelidou & Tsohou, 2020). The use of Instagram to increase or maintain popularity is related to the tendency of some people to look for dishonest ways of like-seeking (Dumas et al., 2020). Instagram users can find out the number of likes received by others and the names of other users who liked the post (Mena et al., 2020)

In general, the decision to hide or not to hide the number of likes is a choice made by respondents for their own good. Respondents were able to measure their limits. Instagram offers an excellent solution regarding the policy

of hiding or not hiding Instagram. Users can efficiently manage features on social media, including deleting selfies with only a few likes (Li et al., 2018). The deleting of the number of ‘Likes’ from posts can contribute to the improved well-being of Instagram users (Mena et al., 2020).

In this study, most respondents mentioned that Instagram likes could boost Confidence. This statement is not exclusive to respondents who display the number of likes; it also applies to some respondents who choose to hide the number of likes. In other words, Instagram-Like tends to influence the personalities of Instagram users. Instagram-like is displayed on every uploaded post image that everyone can see. Thus, the number of likes plays a role in influencing social reinforcement (Tiggemann et al., 2018).

Respondents’ Confidence arises because Instagram-Like is considered a compliment. Praise received can be quality uploads, beautiful self-photos, or exciting videos. Instagram likes can also be viewed as a potential measure of aesthetic appeal (Thömmes & Hübner, 2018). The Like feature is a way to acknowledge someone’s beauty on social media (Chua & Chang, 2016). Receiving ‘Likes’ can increase attractiveness (Meseguer-Martinez et al., 2017).

Instagram-Like is also able to provide support and appreciation. Users who receive likes are increasingly encouraged to upload new content on their feeds. These ‘likes’ can promote self-confidence because Likes represent support

from others for the content posted (Wallace & Buil, 2023). Instagram users provide feedback by clicking the “Like” button to express their appreciation for uploaded images (Thömmes & Hübner, 2018). Higher self-confidence allows one to act more creatively (Lebuda & Karwowski, 2023).

Instagram-Likes are interpreted as signs of love and approval. Those who give likes mean paying attention to the uploaded content. This feeling of being loved and liked undoubtedly boosts people’s Confidence in accepting it. Instagram-Likes can represent a valuable form of social validation (Wallace & Buil, 2021). Pressing the “Like” button can show a quick response to stimuli that capture someone’s attention (Alhabash et al., 2019).

Respondents who receive likes feel that people who give likes agree with them. In other words, others approve of the uploaded content. Self-confidence also arises when people around them can acknowledge them. The number of ‘Likes’ received on a post indicates social validation (Mena et al., 2020). Self-confidence arises when someone believes their actions will yield the expected results (Kiverstein et al., 2019).

Respondents who receive likes can experience a sense of pleasure when the number of likes is high. Instagram’s algorithm will distribute the content to be seen by even more people. Many likes mean that more people will see it. Instagram’s “Like” function creates measurable value within the Instagram post

itself, and how that value is perceived affects how users post and view their posts (Ross, 2019). Instagram users know that more Likes indicate popularity (Wallace & Buil, 2021).

Getting likes does not necessarily boost self-confidence. Respondents mentioned that Instagram-like is a regular feature that does not influence their Confidence. Those who upload content on Instagram, whether videos or photos are already confident. Self-confidence can contribute to cybersecurity awareness (Childers et al., 2023). No correlation was found between perceived social support, self-esteem, and well-being with baseline use of social media (Hunt et al., 2018).

Some respondents also do not care about Instagram Likes. They use Instagram solely for work purposes, and some rarely upload content. Some respondents feel that only ordinary people, as non-influencers, do not need to worry about the number of likes. Additionally, some respondents upload content to share information and are not concerned about getting likes. The popularity of Instagram celebrities can be quantitatively measured through the number of followers and ‘Likes,’ as well as qualitatively through positive comments from followers (Jin & Ryu, 2020). The pressure to show brand impact has prompted some influencers to engage in unethical practices, including buying fake followers and likes (Tafesse & Wood, 2021).

Instagram-Likes are considered just plain content. Likes are not needed to increase self-confidence. Conversely, likes can deceive us.

Receiving likes does not always have to be interpreted as a good thing. It could be other people giving likes because of accidentally (pressing the wrong button) or just a form of bond to others. Some individuals scroll down and give likes on every Instagram content they encounter (Yau & Reich, 2019).

In addition to the data, respondents were asked whether they ever felt dissatisfied when they got a small number of likes. The results showed that 36 respondents said never, and 34 said never. The interval between ever and never is close. However, all data and analysis showed that in this study, there were no striking adverse effects. So, setting Instagram-like is one solution to avoid the adverse effects of using social media. The literature acknowledges that normative Like-seeking can also be positively associated with a sense of peer belonging (Wallace & Buil, 2023).

This study shows that Instagram users in Indonesia have similar perceptions to Instagram users in various regions of the world in interpreting the meaning of the “like” button. The “like” feature on Instagram also psychologically impacts users in Indonesia. Another similarity is that Instagram’s “like” button is a quick way to respond and express interest in shared content, so it is often used to indicate engagement levels.

## CONCLUSION

Instagram users have complete control over the Instagram-like options that allow them to

hide or not to hide their like count. Users have the power to care for their souls to maintain their mental well-being. The Instagram policy helps a person measure his limits to avoid the adverse effects of social media. Instagram is experimenting with hiding the number of “likes” from posts to tackle mental health issues and social media addiction.

Instagram-like can increase one’s self-confidence. Heart signs, such as praise, affection, attention, love, appreciation, support, approval, understanding, and respect, can be interpreted positively. This Instagram-like is an indicator of self-confidence. Individuals who engage intensely with social media often experience a strong sense of social support from their online friends through “Likes” in the photos they share.

This research informs Instagram users that there are settings in user options to show or not show the number of likes according to each user’s needs. Likes can also be used for corporations or public relations in creating social media content because it facilitates evaluation of shared content, and the like feature can measure audience engagement.

This research contains some limitations. The number of respondents is relatively tiny, warranting further research on a larger scale. This study did not explore gender differences in how male and female users manage Instagram Likes. Furthermore, these areas are such good points for future researchers.

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AJ; Visualization, FAS, LHH; Investigation, FAS, LHH; Writing - original draft, FTS., and AJ. All authors have read and agreed to the published version of the manuscript

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## REFERENCES

- Alhabash, S., Almutairi, N., Lou, C., & Kim, W. (2019). Pathways to virality: Psychophysiological responses preceding likes, shares, comments, and status updates on facebook. *Media Psychology, 22*(2), 196–216. <https://doi.org/10.1080/15213269.2017.1416296>
- Aljabri, M., Zagrouba, R., Shaahid, A., Alnasser, F., Saleh, A., & Alomari, D. M. (2023). Machine learning-based social media bot detection: a comprehensive literature review. *In Social Network Analysis and Mining, 13*(1). Springer Vienna. <https://doi.org/10.1007/s13278-022-01020-5>
- Arikunto, S. (2017). *Pengembangan instrumen penelitian dan penilaian program*. Yogyakarta: Pustaka Pelajar.
- Ayoub, C., Pritchard, M., Bagnato, M., Remedios, L., & Potvin Kent, M. (2023). The extent of energy drink marketing on Canadian social media. *BMC Public Health, 23*(1), 767. <https://doi.org/10.1186/s12889-023-15437-w>
- Bergman, S. M., Fearington, M. E., Davenport, S. W., & Bergman, J. Z. (2011). Millennials, narcissism, and social networking: What narcissists do on social networking sites and why. *Personality and Individual Differences, 50*(5), 706–711. <https://doi.org/10.1016/j.paid.2010.12.022>
- Bolaji, D. A. (2023). Construction and Case Analysis of Sensor News Whole Chain Production Model Based on Artificial Intelligence Technology. *Journal of Sensors, 2023*. <https://doi.org/10.1155/2023/9428766>
- Boy, J. D., & Uitermark, J. (2017). Reassembling the city through Instagram. *Transactions of the Institute of British Geographers, 42*(4), 612–624. <https://doi.org/10.1111/tran.12185>
- Brailovskaia, J., Frahsek, M., & Margraf, J. (2022). Work Overload and Addictive Social Media Use: A Relationship with Depression Symptoms and Life Satisfaction. *Journal of Technology in Behavioral Science, 7*(3), 358–367. <https://doi.org/10.1007/s41347-022-00258-2>
- Can, U., & Alatas, B. (2019). A new direction in social network analysis: Online social network analysis problems and applications. *Physica A: Statistical Mechanics and Its Applications, 535*, 122372. <https://doi.org/10.1016/j.physa.2019.122372>
- Carlyle, K. E., Guidry, J. P. D., Williams, K., Tabaac, A., & Perrin, P. B. (2018). Suicide conversations on Instagram™: contagion or caring? *Journal of Communication in Healthcare, 11*(1), 12–18. <https://doi.org/10.1080/17538068.2018.1436500>
- Childers, G., Linsky, C. L., Payne, B., Byers, J., & Baker, D. (2023). K-12 educators' self-confidence in designing and implementing cybersecurity lessons. *Computers and Education Open, 4*(December 2022), 100119. <https://doi.org/10.1016/j.caeo.2022.100119>
- Chua, T. H. H., & Chang, L. (2016). Follow me and like my beautiful selfies: Singapore teenage girls' engagement in self-presentation and peer comparison on social media. *Computers in Human Behavior, 55*, 190–197. <https://doi.org/10.1016/j.chb.2015.09.011>
- Cohen, R., Newton-John, T., & Slater, A. (2018). 'selfie'-objectification: The role of selfies in self-objectification and disordered eating in young women. *Computers in Human Behavior, 79*, 68–74. <https://doi.org/10.1016/j.chb.2017.10.027>
- Djafarova, E., & Trofimenko, O. (2019). 'Instafamous'—credibility and self-presentation of micro-celebrities on social media. *Information Communication and Society, 22*(10), 1432–1446. <https://doi.org/10.1080/13>



- 69118X.2018.1438491
- Duffy, B. E., Pinch, A., Sannon, S., & Sawey, M. (2021). The Nested Precarities of Creative Labor on Social Media. *Social Media + Society*, 7(2), 205630512110213. <https://doi.org/10.1177/20563051211021368>
- Dumas, T. M., Maxwell-Smith, M. A., Tremblay, P. F., Litt, D. M., & Ellis, W. (2020). Gaining likes, but at what cost? Longitudinal relations between young adults' deceptive like-seeking on instagram, peer belonging and self-esteem. *Computers in Human Behavior*, 112(May), 106467. <https://doi.org/10.1016/j.chb.2020.106467>
- Fadhli, I., Hlaoua, L., & Omri, M. N. (2023). Deep learning-based credibility conversation detection approaches from social network. *Social Network Analysis and Mining*, 13(1), 1–15. <https://doi.org/10.1007/s13278-023-01066-z>
- Hafiar, H., Tarifu, L., Kamil, S. U. R., Sudirman, F. A., & Susilawaty, F. T. (2020). Information Literacy And Political Conflict In The Whatsapp Group. *Library Philosophy and Practice*, 1–7.
- Heimbach, I., & Hinz, O. (2018). The impact of sharing mechanism design on content sharing in online social networks. *Information Systems Research*, 29(3), 592–611. <https://doi.org/10.1287/isre.2017.0738>
- Hunt, M. G., Marx, R., Lipson, C., & Young, J. (2018). No more FOMO: social media usage and types of social media content on students. *Journal of Social and Clinical Psychology*, 37(10), 751–768.
- Instagram users in Indonesia - January 2023 | NapoleonCat.* (n.d.). Retrieved May 18, 2023, from <https://napoleoncat.com/stats/instagram-users-in-indonesia/2023/01/>
- Ivie, E. J., Pettitt, A., Moses, L. J., & Allen, N. B. (2020). A meta-analysis of the association between adolescent social media use and depressive symptoms. *Journal of Affective Disorders*, 275, 165–174. <https://doi.org/10.1016/j.jad.2020.06.014>
- Jin, S. V., & Ryu, E. (2020). “I’ll buy what she’s #wearing”: The roles of envy toward and parasocial interaction with influencers in Instagram celebrity-based brand endorsement and social commerce. *Journal of Retailing and Consumer Services*, 55(March), 102121. <https://doi.org/10.1016/j.jretconser.2020.102121>
- Kim, M., & Kim, J. (2020). Destination authenticity as a trigger of tourists' online engagement on social media. *Journal of Travel Research*, 59(7), 1238–1252. <https://doi.org/10.1177/0047287519878510>
- Kiverstein, J., Rietveld, E., Slagter, H. A., & Denys, D. (2019). Obsessive compulsive Disorder: A Pathology of Self-Confidence? In *Trends in Cognitive Sciences* (Vol. 23, Issue 5, pp. 369–372). Elsevier Ltd. <https://doi.org/10.1016/j.tics.2019.02.005>
- Kunja, S. R., & GVRK, A. (2020). Examining the effect of eWOM on the customer purchase intention through value co-creation (VCC) in social networking sites (SNSs): A study of select Facebook fan pages of smartphone brands in India. *Management Research Review*, 43(3), 245–269. <https://doi.org/10.1108/MRR-04-2017-0128>
- Larsson, A. O. (2018). Diversifying likes: Relating reactions to commenting and sharing on newspaper Facebook pages. *Journalism Practice*, 12(3), 326–343. <https://doi.org/10.1080/17512786.2017.1285244>
- Lebuda, I., & Karwowski, M. (2023). Dispositional self-regulation strengthens the links between creative activity and creative achievement. *Personality and Individual Differences*, 200. <https://doi.org/10.1016/j.paid.2022.111894>
- Li, P., Chang, L., Chua, T. H. H., & Loh, R. S. M. (2018). “Likes” as KPI: An examination of teenage girls' perspective on peer feedback on Instagram and its influence on coping response. *Telematics and Informatics*, 35(7), 1994–2005. <https://doi.org/10.1016/j.tele.2018.07.003>
- Liu, Y., Chiu, D. K. W., & Ho, K. K. W. (2023). Short-Form videos for public library marketing: Performance analytics of douyin in China. *Applied Sciences*, 13(6), 3386. <https://doi.org/10.3390/app13063386>
- Mena, P., Barbe, D., & Chan-Olmsted, S. (2020). Misinformation on Instagram: The impact of trusted endorsements on message credibility. *Social Media and Society*, 6(2). <https://doi.org/10.1177/2056305120935102>



- Meseguer-Martinez, A., Ros-Galvez, A., & Rosa-Garcia, A. (2017). Satisfaction with online teaching videos: A quantitative approach. *Innovations in Education and Teaching International*, 54(1), 62–67. <https://doi.org/10.1080/14703297.2016.1143859>
- Novack, K., Dufour, R., Picard, L., Taddeo, D., Nadeau, P.-O., Katzman, D. K., Booij, L., & Chadi, N. (2023). Canadian pediatric eating disorder programs and virtual care during the COVID-19 pandemic: a mixed-methods approach to understanding clinicians' perspectives. *Annals of General Psychiatry*, 22(1), 16. <https://doi.org/10.1186/s12991-023-00443-4>
- Parra, H., Briselda, P., & López, J. (2022). Socio-formative pedagogical counseling: professionalization and improvement of teaching practice in compulsory education in northern Mexico. *International Journal of Educational Methodology*, 8(1), 1–9. <https://doi.org/10.12973/ijem.8.1.1>
- Peng, P., & Liao, Y. (2023). Six addiction components of problematic social media use in relation to depression, anxiety, and stress symptoms: a latent profile analysis and network analysis. *BMC Psychiatry*, 23(1), 321. <https://doi.org/10.1186/s12888-023-04837-2>
- Pilime, S., & Jewett, S. (2023). The infant feeding methods promoted by South African Instagram influencers in relation to crying and sleeping, 2018-2020: a retrospective digital ethnography. *International Breastfeeding Journal*, 18(1), 17. <https://doi.org/10.1186/s13006-023-00555-3>
- Reich, S., Schneider, F. M., & Heling, L. (2018). Zero likes – symbolic interactions and need satisfaction online. *Computers in Human Behavior*, 80, 97–102. <https://doi.org/10.1016/j.chb.2017.10.043>
- Ross, S. (2019). Being real on fake Instagram: Likes, images, and media ideologies of value. *Journal of Linguistic Anthropology*, 29(3), 1–16. <https://doi.org/10.1111/jola.12224>
- Seifert, L. B., Becker, P., Pabst, A., Sander, A. K., Schneider, J., Schorn, L., Zeller, A., Hoffmann, J., & Thiem, D. G. E. (2023). #OMFSurgery: analyzing the use of social media applications in oral and maxillofacial surgery resident training. *BMC Oral Health*, 23(1), 212. <https://doi.org/10.1186/s12903-023-02872-9>
- Skidmore, S., Prior, Y., Nester, C., Bird, S., & Vasilica, C. (2023). Where do you stand?: an exploration of perspectives toward feet, foot health, and footwear using innovative digital methods. *Journal of Foot and Ankle Research*, 16(1), 1–12. <https://doi.org/10.1186/s13047-023-00621-3>
- Sokolova, K., & Kefi, H. (2020). Instagram and YouTube bloggers promote it, why should I buy? How credibility and parasocial interaction influence purchase intentions. *Journal of Retailing and Consumer Services*, 53(September 2018), 101742. <https://doi.org/10.1016/j.jretconser.2019.01.011>
- Soumelidou, A., & Tsohou, A. (2020). Effects of privacy policy visualization on users' information privacy awareness level: The case of Instagram. *Information Technology and People*, 33(2), 502–534. <https://doi.org/10.1108/ITP-08-2017-0241>
- Subramani, N., Veerappampalayam Easwaramoorthy, S., Mohan, P., Subramanian, M., & Sambath, V. (2023). A gradient boosted decision tree-based influencer prediction in social network analysis. *Big Data and Cognitive Computing*, 7(1), 6. <https://doi.org/10.3390/bdcc7010006>
- Tafesse, W., & Wood, B. P. (2021). Followers' engagement with instagram influencers: The role of influencers' content and engagement strategy. *Journal of Retailing and Consumer Services*, 58(March 2020), 102303. <https://doi.org/10.1016/j.jretconser.2020.102303>
- Talbot, C. V., Campbell, C. E. R., & Greville-Harris, M. (2023). “Your struggles are valid, you are worthy of help and you deserve to recover”: narratives of recovery from orthorexia nervosa. *Eating and Weight Disorders*, 28(1). <https://doi.org/10.1007/s40519-023-01554-3>
- Teresa, M., Moro, S., Rita, P., & Ramos, P. (2019). Leveraging a luxury fashion brand through social media. *European Research on Management and Business Economics*, 25(1), 15–22. <https://doi.org/10.1016/j.iedeen.2018.10.002>
- Thömmes, K., & Hübner, R. (2018). Instagram likes for architectural photos can be predicted by quantitative balance measures and curvature.

- Frontiers in Psychology*, 9(JUN), 1–17. <https://doi.org/10.3389/fpsyg.2018.01050>
- Tiggemann, M., Hayden, S., Brown, Z., & Veldhuis, J. (2018). The effect of Instagram “likes” on women’s social comparison and body dissatisfaction. *Body Image*, 26, 90–97. <https://doi.org/10.1016/j.bodyim.2018.07.002>
- Vraga, E. K., Kim, S. C., Cook, J., & Bode, L. (2020). Testing the effectiveness of correction placement and type on Instagram. *International Journal of Press/Politics*, 25(4), 632–652. <https://doi.org/10.1177/1940161220919082>
- Wallace, E., & Buil, I. (2021). Hiding Instagram likes : Effects on negative affect and loneliness. *Personality and Individual Differences*, 170(June 2020), 110509. <https://doi.org/10.1016/j.paid.2020.110509>
- Wallace, E., & Buil, I. (2023). Investigating trait antecedents of normative and deceptive Like-seeking on Instagram. *Personality and Individual Differences*, 208(February), 112175. <https://doi.org/10.1016/j.paid.2023.112175>
- Wilson, B., Knobloch-westerwick, S., Robinson, M. J., Wilson, B., Knobloch-westerwick, S., Robinson, M. J., Wilson, B., Knobloch-westerwick, S., & Robinson, M. J. (2018). Picture yourself healthy — how users select mediated images to shape health intentions and behaviors picture yourself healthy — how users select mediated images to shape health intentions and behaviors. *Health Communication*, 00(00), 1–10. <https://doi.org/10.1080/10410236.2018.1437527>
- Xu, X., Yao, Z., & Teo, T. S. H. (2020). Moral obligation in online social interaction: Clicking the “like” button. *Information and Management*, 57(7). <https://doi.org/10.1016/j.im.2019.103249>
- Yau, J. C., & Reich, S. M. (2019). “It’s Just a Lot of Work”: Adolescents’ Self-Presentation Norms and Practices on Facebook and Instagram. *Journal of Research on Adolescence*, 29(1), 196–209. <https://doi.org/10.1111/jora.12376>
- Yum, S. (2023). The COVID-19 Response in North America. *Disaster Medicine and Public Health Preparedness*, 17(10228). <https://doi.org/10.1017/dmp.2022.290>