

Supernatural Facebook groups in Indonesia

Aji Prasetya Wibawa^{1,*}, Bayu Kuncoro Aji², Brilliant Filby³, Farhan Fadhilah⁴,
Imro'aturroziyah⁵, Adib Ahmad Istiqlal⁶

^a Department of Electrical Engineering, Faculty of Engineering, Universitas Negeri Malang, Malang, Indonesia

¹ aji.prasetya.ft@um.ac.id*; ² bayu.kuncoro.1805356@students.um.ac.id; ³ brilliant.filby.1805356@students.um.ac.id;

⁴ farhan.fadhilah.1805356@students.um.ac.id; ⁵ imro'aturroziyah.1805356@students.um.ac.id; ⁶ adib.ahmad.1805356@students.um.ac.id

* corresponding author

ARTICLE INFO

ABSTRACT

Article history

Received December 10, 2020

Revised January 1, 2021

Accepted January 14, 2021

Keywords

Supernatural

Observation

Facebook

Social Media

Group

Social media groups have various discussion topics, including supernatural. This paper aims to examine supernatural groups on Facebook based on the number of followers, the number of posts, and discussion topics. The research phase consists of data collection, pre-processing, processing, and data visualization. Observations review the group characteristics: group status, members, posts per day, and published content. The immune science group has 4,437,000 with a total of 300 posts. On the other hand, Fortune tellers have 95,271 members with a total of 2260 posts. However, not all group's members are active in content contribution. Most of them are passive members who read or follow the posts.

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1. Introduction

Social media allows interaction and exchange of information between people using virtual networks [1]. The popular social media are Facebook, Twitter, WhatsApp, Instagram, Line, Youtube, and Linked In. In 2021, Facebook users reach 69% of total social media users [2]. In Indonesia, social media users reach 170 million people [3], continuously growing. The features of such media may trigger an increase in social media users.

Facebook provides people to form a virtual community, called a group. The communities may share networks with a single click [4]. These groups bring up endless discussions on diverse topics, where distance and time are no longer considered information obstacles [5]. One strong binder of a community is similar interest [6], such as supernatural topics.

Supernatural deals with the outer human mind relating to mystical subjects [7]. Supernatural-related discussions have happened since back centuries to the present [8]. These superstitious things are inseparable from the role of digital media that facilitates the dissemination of information [9]. In other words, the supernatural is past information that continues to go hand in hand with the growth of technology.

This article discusses supernatural things on Indonesian Facebook-groups. In-depth observations using Indonesian keywords explore the group's number of followers, posts, and other related matters. The results of this study may provide information to readers related to the phenomena and habits of the groups.

2. Method

This study discusses the supernatural using observation methods. The study involved Facebook group members without considering their age, gender, educational background, and occupation. This research has 16 supernatural groups as in Table 1. We search the group based on Indonesian keywords and label it in a specific category. The observation started from 23 to 30 March 2021. We observed the number of members, posts per day, and the group's content during the period.

Table.1 Total Group Categories by Status

Category	Public	Private
<i>dukun dan paranormal</i> (witchdoctors)	5	12
<i>gunung</i> (mountains)	0	4
<i>ilmu kebal</i> (immunity against weapon)	0	5
<i>orang pintar</i> (shamans)	1	0
<i>pantai selatan</i> (south coast of java island)	1	1
<i>pelet</i> (incantation)	0	5
<i>pendopo spiritual</i> (spiritual javanese pavilion)	2	1
<i>peramal</i> (fortune teller)	17	14
<i>pesugihan</i> (ocult money rituals)	5	1
<i>pusaka dan benda bertuah</i> (kris and magical objects)	1	3
<i>pusaka dan minyak bertuah</i> (heirloom and magical oil)	2	1
<i>rumah hantu</i> (haunted house)	0	2
<i>santet</i> (black magic)	0	5
<i>supernatural</i>	7	5
<i>tempat pesugihan</i> (places for money rituals)	0	2
<i>tempat ritual</i> (ritual places)	2	1

Afterward, we eliminate noise [10], aiming to level up the classification accuracy in the classification. In this study, the way used to eliminate the missing value used the average value of each attribute [11]. The technique used is a non-participant observation technique by taking an outsider position and trying to distance himself from the categorization and evaluation taken for granted [12]. The last stage is data visualization and analysis using various forms, for example, statistical graphs, plots, and information graphs [13]. In this visual stage, the type of graphics used is the area and line that aims to match the total of the attributes [14]. The visualization results are then analyzed to draw the study conclusion.

3. Results and Discussion

Through Facebook, one can communicate virtually in groups, share common interests and, express opinions [15]. Facebook also helps in disseminating information, one of which is paranormal topics. In this case, social media plays a role in fostering trust in paranormal research scientifically [16].

More than 800 million Facebook users have changed the way they communicate and share information [17]. Facebook as a media provider of information, also makes it easy for someone to know new things. Similarly, when it comes to paranormal topics, users can find out both from individual posts and posts in groups.

Generally, social media is open to everyone. Content posted to the public group homepage is visible to all Facebook users [18]. Facebook also gives its users the flexibility to set up their privacy. By setting private, only members can access information in the group [19] to keep the information confidential.

This study examined groups with private and public status in the supernatural context described in Table 2. The study identified 105 groups: 65 private groups and 40 public groups. The group with the highest number of members is a private group with a total of 6,700,000 members. The ratio of public and private groups is 1:25, considered the proportional ratio [20], that is also affected by sometimes incomplete, inconsistent, and redundant data [21].

Table.2 Number of supernatural groups and total members

Group Status	Number of Groups	Total Members
Public (0)	40	291,843
Private (1)	65	6.700.000

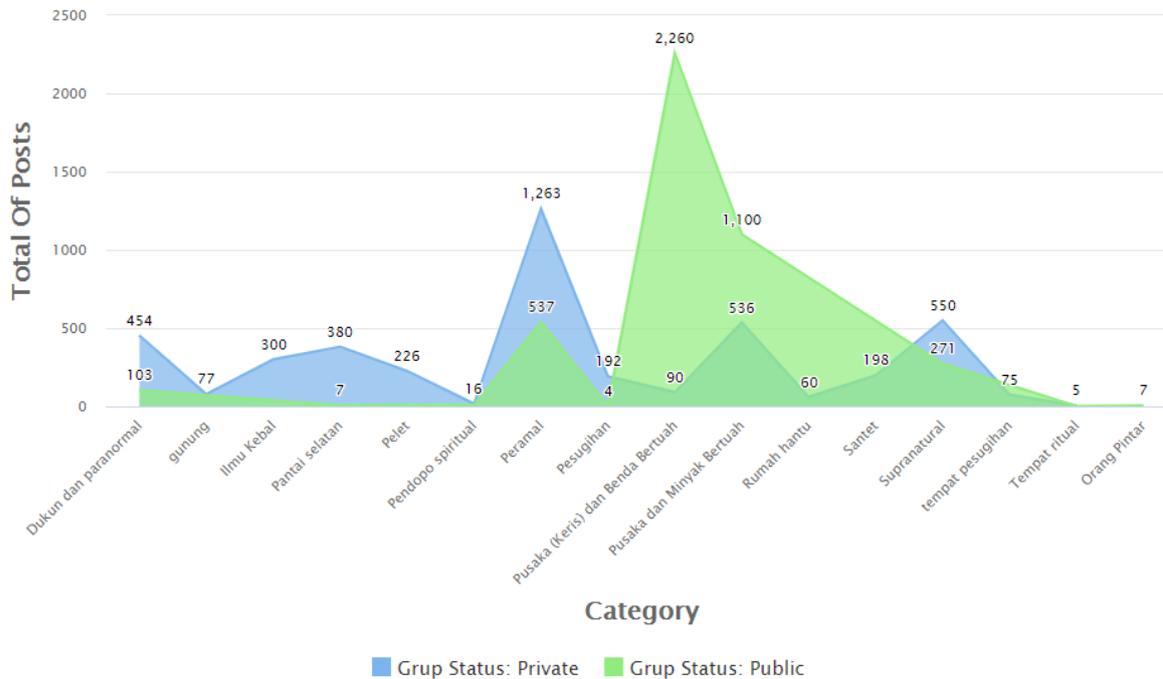


Fig. 1.Graph of the most posts in a group

Data can be visualized through graphs to understand data sets from different perspectives [22]. Fig.1 presented an area graph of the number of posts in both groups transformed into tables to make it easier to read the highest value in terms of total posts and members.

Table.3 Graph of the most posts in a group

Group Status	Group Name	Total Posts	Total Members
Public (0)	<i>pusaka (keris) dan benda bertuah</i> (magical objects)	2260	95,271
Private (1)	<i>peramal</i> (fortune teller)	1263	22,390

Table 3 show two categories: privacy and public groups. The status of the "public" group occupied the highest position with a total of 2,260 posts in the *Pusaka (Keris) dan Benda Bertuah* (magical objects) and *Peramal* (fortune teller) groups having the highest level in the privacy group status with 1,263 posts. The privacy group's characterization of individual actions is described through the R2 model that 22.5% of people rethink when to provide information [23].

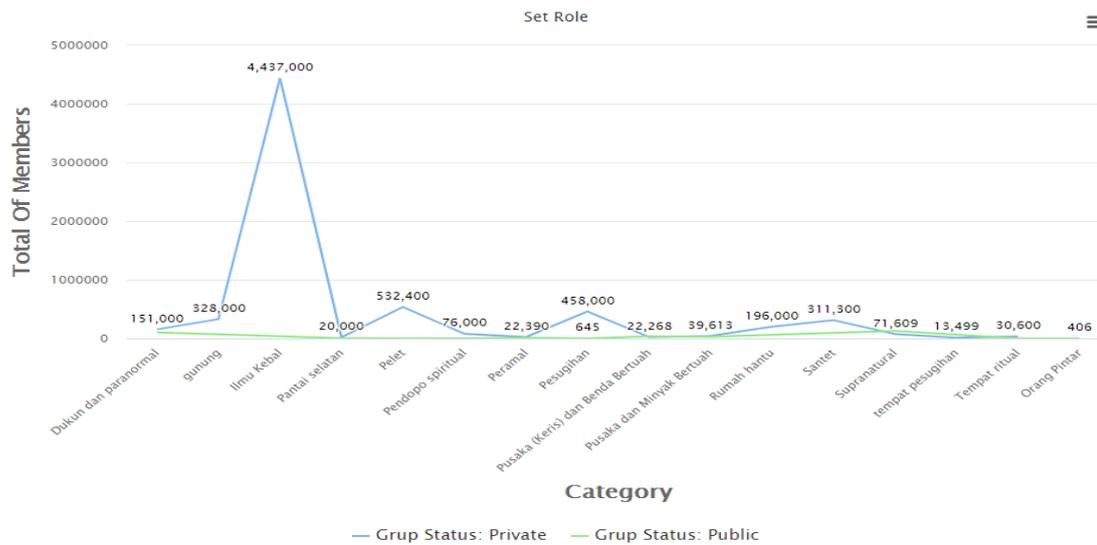


Fig. 2. Graph of the most members in a group

In Fig. 2, the total members of both groups are shown. The total members in both group statuses are inversely proportional to the total posts. The highest total members of the *Ilmu Kebal* (immunity against weapon) privacy group were 4,437,000 and 124,119 in the supernatural public group.

Table.4 Highest Number of Members and Posts

Group Status	Group Name	Total Post	Total Members
Public (0)	<i>Supernatural</i>	271	124,119
Private (1)	<i>Ilmu kebal</i> (Immune Sciences)	300	4,437,000

Table 4 shows the total posts of the highest total members of the public and private groups. Compared to Table 2, public groups have a relatively high rate of dissemination of information (posts) with 95,271 members compared to privacy groups with a total of 4,437,000 with a total of not enough posts signed with the total members listed. So it appears that the public has an interest in the supernatural in private (privacy), indicates a belief in supernatural powers and unexplained powers, thus becoming a psychological trait [24]. In this study, there were 16 group categories based on their status described in Table 4.

The group 16 categories consist of 6 privacy groups, 1 public group, and 9 public and private groups. The nine categories that have public group status and privacy include, *dukun* and *paranormal* (shaman and paranormal), *pantai selatan* (south beach), *pendopo spiritual* (spiritual pendopo), *peramal* (fortune teller), *pesugihan* (pesugihan), *pusaka* and *benda bertuah*, *pusaka* (heirloom and magical objects), *pusaka* and *minyak bertuah* (heirloom and magical oil), supernatural (supernatural), and *tempat supernatural* (supernatural place). The category with the total groups is *Peramal* (fortune teller). The statement suggests that the *Peramal* (Fortune Teller) category information is more interesting than other categories. This is evidenced by people who believe in the supernatural in the form of magic.

4. Conclusion

Based on research conducted using observation methods, there is information that as many as 105 supernatural groups are public and private. The highest interest is owned by a privacy group of 6,700,000 people, of which 16 categories are obtained and nine of them are private and public. Forecasters dominate the nine categories with the highest value in the section of clairvoyant privacy status, suggests that groups with prominent members do not necessarily have more posts than groups with fewer members. Supernatural groups are mostly private activities that are invisible. To conclude, this is done to keep things related to the supernatural, not to become public consumption.

References

- [1] D. Zeng, H. Chen, R. Lusch, and S. H. Li, "Social media analytics and intelligence," *IEEE Intelligent Systems*, vol. 25, no. 6, pp. 13–16, Nov-2010.
- [2] B. Auxier and M. Anderson, "Social Media Use in 2021," *Pew Research Center*, Apr-2021. .
- [3] S. Kemp, "Digital in Indonesia: All the Statistics You Need in 2021 — DataReportal – Global Digital Insights," Feb-2021. .
- [4] J. Swart, C. Peters, and M. Broersma, "Sharing and Discussing News in Private Social Media Groups: The social function of news and current affairs in location-based, work-oriented and leisure-focused communities," *Digit. Journal.*, vol. 7, no. 2, pp. 187–205, Feb. 2019.
- [5] T. Sinta, N. Fatimah, and R. Hidayah, "The Development of CIHOE Game As A Learning Media In The Elemental Chemistry Material," *Int. J. Act. Learn.*, vol. 6, no. 2, pp. 49–57, Oct. 2021.
- [6] S. Garfield, "Types of Communities & Enterprise Social Network Groups: a Trail that collects," Apr-2018.
- [7] Bennett, "Aspects Of Supernatural Belief, Memorate and Legend in a Contemporary Urban Environment," 1985.
- [8] Tim CNN Indonesia, "Muasal Mistik 'Bertahan' di Tengah Masyarakat Indonesia," *CNN Indonesia*, Oct-2019.
- [9] E. M. Syafrudin, "Superstitious Belief in Purchasing Property," *S1 thesis, UAJY.*, pp. 1–10, 2016.
- [10] R. Amanda and E. S. Negara, "Analysis and Implementation Machine Learning for YouTube Data Classification by Comparing the Performance of Classification Algorithms," *J. Online Inform.*, vol. 5, no. 1, pp. 61–72, Jul. 2020.
- [11] A. Bakker, "The early history of average values and implications for education," *J. Stat. Educ.*, vol. 11, no. 1, 2003.
- [12] M. Ciesielska, K. W. Boström, and M. Öhlander, "Observation methods," in *Qualitative Methodologies in Organization Studies*, vol. 2, Springer International Publishing, 2017, pp. 33–52.
- [13] R. L. Cardoso, R. O. Leite, and A. C. B. De Aquino, "A graph is worth a thousand words: How overconfidence and graphical disclosure of numerical information influence financial analysts accuracy on decision making," *PLoS One*, vol. 11, no. 8, p. 160443, Aug. 2016.
- [14] W. Y. Mengesha, Yonatan; Singh, Ajit Pal; Amedie, "Quality Improvement Using Statistical Process Control Tools in Glass Bottles Manufacturing Company," *Int. J. Qual. Res.*, vol. 7, no. 1, pp. 107–126, 2013.
- [15] B. M. Garrett and R. L. Cutting, "Magical beliefs and discriminating science from pseudoscience in undergraduate professional students," *Heliyon*, vol. 3, no. 11, p. e00433, Nov. 2017.
- [16] L. E. Young, K. Fujimoto, and J. A. Schneider, "Facebook group affiliation ties, group topics, and HIV behavioral characteristics among young Black men who have sex with men: Potential for public health intervention," *SSM - Popul. Heal.*, vol. 9, Dec. 2019.
- [17] R. E. Wilson, S. D. Gosling, and L. T. Graham, "A Review of Facebook Research in the Social Sciences," *Perspect. Psychol. Sci.*, vol. 7, no. 3, pp. 203–220, May 2012.
- [18] M. Stollefson, S. Paige, A. Apperson, and S. Spratt, "Social Media Content Analysis of Public Diabetes Facebook Groups," *J. Diabetes Sci. Technol.*, vol. 13, no. 3, pp. 428–438, May 2019.
- [19] N. S. Lau and L. Lam, "An investigation of the determinants influencing student learning motivation via facebook private group in teaching and learning," in *Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)*, 2012, vol. 7411 LNCS, pp. 35–44.
- [20] V. Agarwal, "Research on Data Preprocessing and Categorization Technique for Smartphone Review Analysis," *Int. J. Comput. Appl.*, vol. 131, no. 4, pp. 30–36, 2015.
- [21] C. Viau and M. J. McGuffin, "ConnectedCharts: Explicit Visualization of Relationships between Data Graphics," *Comput. Graph. Forum*, vol. 31, no. 3pt4, pp. 1285–1294, Jun. 2012.

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- [22] M. Hajli, "Information Sharing on Social Networking Sites: the role of perceived control of information and gender," in *Proceedings of the Eighth Pre-ICIS Workshop on Information Security and Privacy*, 2013.
- [23] J. Schuurmans-Stekhoven, "Measuring spirituality as personal belief in supernatural forces: Is the Character Strength Inventory-Spirituality subscale a brief, reliable and valid measure," *Implicit Relig.*, vol. 17, no. 2, pp. 211–222, 2014.
- [24] M. H. Kahissay, T. G. Fenta, and H. Boon, "Beliefs and perception of ill-health causation: a socio-cultural qualitative study in rural North-Eastern Ethiopia," *BMC Public Health*, vol. 17, no. 1, p. 124, Dec. 2017.