

Research Article

The Popularity Principle and the Distortion of Perception

(A Critique of Social Media Algorithms and Their Role in Shaping Public Perception of Indonesian Traditional Arts)

Moch. Anil Syidqi^{1*}, Aris Setiawan²

^{1,2} Master's Program in Art Studies; Postgraduate Program; Institut Seni Indonesia Surakarta; Indonesia
Corresponding Author : mochanil@std.isiska.ac.id

Abstract: Traditional arts in Indonesia face a growing threat not from physical displacement, but from algorithmic distortion. This study examines how social media algorithms shape and distort public perception of Indonesian traditional arts specifically *jaranan* and *barongan* through the lens of Van Dijck's (2013) *popularity principle*: the principle that content distribution is determined by interaction volume rather than cultural value. Employing qualitative thematic content analysis, this study analyzes comments on five viral social media videos sourced from YouTube and TikTok, each depicting riots or tension at traditional art performances. Findings demonstrate that the *popularity principle* operates consistently and cumulatively across all five samples: algorithmically provocative titles, emotional polarization in comment sections, and micro-behavioral signals such as watch duration and replay collectively function as interaction signals that drive the platform to distribute riot content far more widely than culturally substantive footage. The consequences extend beyond perception: event organizers suffer long-term reputational and economic damage, while collective stereotypes associating *jaranan* with violence and disorder become sufficiently entrenched to surface spontaneously in unrelated contexts. A comparative analysis of a Kangen Band concert video reveals that these stereotypes have already achieved the status of cultural reference points. This study argues that strategic resistance is possible: the same algorithmic logic that amplifies negative content can be deployed to circulate culturally rich content, provided that artists, communities, and government commit to producing content designed to generate high-quality interaction. The challenge is to transform social media from a distorting mirror into an instrument of cultural preservation.

Keywords: Algorithmic Distortion; Cultural Preservation; Popularity Principle; Social Media; Traditional Arts.

Re Received: October 29, 2025

Revised: November 30, 2025

Accepted: December 27, 2025

Published: December 31, 2025

Curr. Ver.: December 31, 2025



Copyright: © 2025 by the authors.
Submitted for possible open
access publication under the
terms and conditions of the
Creative Commons Attribution
(CC BY SA) license
(<https://creativecommons.org/licenses/by-sa/4.0/>)

1. Introduction

Traditional arts constitute one of the foundational pillars of a nation's cultural identity, preserving historical, aesthetic, and philosophical values transmitted across generations. In Indonesia, the rich diversity of traditional arts encompassing the Gandrung dance of Banyuwangi, *wayang kulit* (shadow puppetry), Balinese dance, and *jaranan* (trance horse dance) reflects an extraordinary wealth of cultural heritage (Susanti & Koswara, 2024; Wiyogo et al., 2024). Yet, amid the rapid advancement of digital technology and the expansion of social media platforms, traditional arts face unprecedented challenges: they must not only compete for public attention, but also contend with narrative distortions capable of seriously damaging their image (Sutisna & Seminingrat, 2024).

As an open, fastmoving information ecosystem, social media has fundamentally transformed how societies consume, produce, and distribute cultural content (Hong, 2022). On the one hand, platforms such as YouTube, Instagram, and TikTok offer traditional arts the opportunity to reach wider audiences, transcending geographical and demographic boundaries a genuine potential for the democratization of content distribution, albeit one not without structural constraints (Morini et al., 2025). On the other hand, the algorithmic

characteristics of social media which tend to prioritize dramatic and emotionally charged content risk distorting the representation of traditional arts in the digital public sphere. This mechanism is rooted in the way platforms optimize user engagement: algorithms are designed to maximize interaction, and because negatively charged emotional content consistently generates higher engagement, platforms structurally amplify its distribution (Metzler & Garcia, 2024). The viral spread of content depicting riots or tension at traditional art performances as opposed to content that highlights their aesthetic and philosophical values constitutes an ironic and troubling reality, confirmed by algorithmic research demonstrating that algorithms systematically elevate negatively charged emotional content above more substantive material (Milli et al., 2025).

This study proceeds from that concern. By examining the dynamics of the relationship between social media and traditional arts, it aims to identify how social media algorithms shape and distort public perception of traditional arts tracing the mechanisms of their spread, the impacts they produce, and the space that remains for preservation amid the dominance of negative narratives.

This study employs a critical perspective toward the algorithmic structure of social media as a framework for understanding how public perception of traditional arts is constructed and distorted. A number of recent studies have examined dimensions closely related to this inquiry, albeit with different emphases: Fadilan et al. (2025) investigate the digitalization of traditional culture through new media platforms in general terms, without engaging with the algorithmic mechanisms that shape perception; Hua et al. (2024) study the influence of social media content on intangible cultural heritage preservation from the perspective of tourists rather than arts communities; while Zhang et al. (2024) analyze public perception of intangible cultural heritage through online reviews without considering the role of distribution algorithms. The specific question that remains unaddressed in these studies is precisely how Van Dijck's *popularity principle* the principle that content distribution is determined by interaction volume rather than quality concretely operates to distort public perception of Indonesian traditional performing arts. This study addresses that gap through an analysis of content that has actually gone viral on YouTube and TikTok (Van Dijck & Poell, 2013).

2. Proposed Method

This study employs a qualitative approach using thematic content analysis of social media comments. This approach was chosen because the study seeks to understand how public perception is formed and directly articulated by social media users in response to viral content from traditional art performances something that cannot be captured by quantitative methods alone. Thematic content analysis allows the researcher to identify recurring patterns of meaning in the comments without reducing them to numerical data.

The primary data source consists of comments on five videos of traditional art performances containing elements of riot or tension that have garnered significant viewership and interaction. Three videos are sourced from YouTube: (1) "*Wongse aryo budoyo 2024 ricuh*" [roughly: "Aryo Budoyo troupe 2024 in riot"] from the channel @SEPUTARJARANAN1279 (343,000 views, 2,700 likes, 109 comments); (2) "*Viral! Terekam Jelas Barongan Kepruk Kepala Orang*" ["Viral! Clearly Captured on Camera: Barongan Strikes Man's Head"] from @LewungChannel (513,000 views, 3,900 likes, 172 comments); and (3) "*BARONGAN Ngamuk! Stop Penonton Tidak Kondusif Jaranan NEW SABDO MANGGOLO Live PubRubuh Semen Kediri*" ["BARONGAN Rampages! Stop the Disruptive Audience Jaranan NEW SABDO MANGGOLO Live PuhRubuh Semen Kediri"] from @noksonmania (1,532,043 views, 4,800 likes, 310 comments). Two additional sources are drawn from TikTok: the pattern of content associated with the search keyword "*Kesenian Rusub*" ["Traditional Arts Riot"], and the Kangen Band concert case documented under the keyword "*Andika Kangen Band meneriakkan kata kampung saat konser*" ["Andika of Kangen Band shouting 'boorish' at the concert"]. The comments are not directly quoted; rather, they are analyzed thematically to identify the dominant patterns of public perception that emerge from each piece of content.

The analytical framework draws on Van Dijck's (2013) theory of the culture of connectivity, and in particular the concept of the *popularity principle* the principle that social media platforms distribute content based on interaction volume (likes, comments, views) rather than the quality or depth of its message. The conceptual elaboration of this principle is further supported by Van Dijck & Poell (2013), who assert that popularity, connectivity, and datafication constitute the foundational and mutually reinforcing principles of social

media logic. Through this framework, the collected comments are read not merely as individual expressions, but as products of a platform ecosystem that incentivizes particular types of response.

3. Results and Discussion

Analysis of Video Samples: The Mechanism of Perception Distortion

All five samples examined reveal a consistent pattern: content depicting physical violence or tension in traditional art performances receives algorithmic distribution far exceeding that of content foregrounding cultural value. The following presents an analysis of each sample in turn.

Video 1: "Wonge aryo budoyo 2024 ricuh" (@SEPUTARJARANAN1279)

Interaction data: 343,000 views | 2,700 likes | 109 comments

Content characteristics

This video captures a riot incident during the Aryo Budoyo 2024 *jaranan* performance. Its title containing the word "*ricuh*" (riot/chaotic) was chosen explicitly to bait clicks. The footage is amateur and shaky, portraying the chaos from the perspective of a viewer caught in the middle of the crowd. No context is provided regarding who the *jaranan* group is, what cultural significance the performance holds, or what transpired before and after the incident.

Representative comment patterns

The dominant comment themes cluster into three categories: (1) negative generalizations targeting *jaranan* audiences ("*jaranan* audiences are always unruly," "it's perfectly normal for a *jaranan* to end in a riot"); (2) expressions of concern for the art form's image ("I feel sorry for the performers all that hard rehearsal, wrecked by a few troublemakers"); and (3) entertainment-oriented comments that treat the video as conflict spectacle rather than a cultural event. Almost no comments engage with the artistic dimension or cultural value of the performance.

How the popularity principle operates (Van Dijck, 2013)

The word "*ricuh*" in the title functions as an immediate emotional interaction trigger. Within the logic of the *popularity principle*, every click, comment, and replay generated by that word constitutes a signal sent to YouTube's algorithm to distribute this video to more users including users who were not seeking *jaranan* content at all. The algorithm makes no distinction as to whether the interaction carries cultural value; what it reads is volume alone (Van Dijck & Poell, 2013). The result: 343,000 users received their first impression of *jaranan* through chaos, not through performance.

Video 2: "Viral! Terekam Jelas Barongan Kepruk Kepala Orang" (@LewungChannel)

Interaction data: 513,000 views | 3,900 likes | 172 comments

Content characteristics

This video captures a rare incident during a *barongan* performance: the performer portraying the barongan beast strikes an audience member on the head. The title contains two algorithmically potent elements: the word "Viral!" at the outset which paradoxically propels the content toward virality precisely by laying claim to that status and an explicit, visceral descriptive phrase ("*kepruk kepala orang*," literally "strikes a person's head"). No contextual explanation is offered as to whether the act was part of the performance, a response to provocation, or an entirely unscripted incident.

Representative comment patterns

The comments reveal sharp polarization: some audience members defend the *barongan* performer's action ("the audience is at fault everyone knows not to get close to the barongan"), while others condemn it ("this is assault, not art"). Most analytically significant is a third cluster: users who share the video to others with a humorous or sensationalist framing, directly amplifying the content's viral reach. Almost no comments address the *barongan* tradition, its ritual significance, or the performance context.

How the popularity principle operates (Van Dijck, 2013)

This case demonstrates two layers of the *popularity principle*. First, a title already claiming "Viral!" functions as a form of early social validation users tend to click content that has been declared viral out of fear of missing out. Second, polarization in the comment section generates more interaction than consensus ever would. The algorithm reads a protracted debate as a signal that the content is highly compelling, and distributes it more widely accordingly. As a result, the perception that circulates that *barongan* is synonymous with physical violence is a product of algorithmic dynamics, not a reflection of the actual reality of *barongan* performance as a whole.

Video 3: "BARONGAN Ngamuk! Stop Penonton Tidak Kondusif Jaranan NEW SABDO MANGGOLO" (@noksonmania)

Interaction data: 1,532,043 views | 4,800 likes | 310 comments

Content characteristics

This is the highestviewed sample in the study, surpassing 1.5 million views. Its title contains the word "*Ngamuk!*" (Rampages!), written with an exclamation mark, alongside the phrase "Stop Penonton Tidak Kondusif" ("Stop the Disruptive Audience"), which implicitly positions the audience as the source of the problem. Notably, the video actually depicts attempts by event organizers to bring the situation under control it does not document a straightforward riot. Nevertheless, the title's framing selects the most dramatic dimension of the event as clickbait, eliding the fact that the performance ultimately continued without further incident.

Representative comment patterns

With 310 comments and 1.5 million views, the interaction volume of this video far exceeds that of the two preceding samples. Comment themes include: (1) comparisons with riots elsewhere ("this happened in my area too"); (2) practical suggestions for event management ("they should have used barrier fencing"); (3) location questions ("where is this?") indicating that new users, unfamiliar with this troupe, were exposed to the content through algorithmic recommendation rather than active search. This third cluster is analytically the most significant: it represents newly formed public perceptions shaped purely by algorithmic distribution.

How the popularity principle operates (Van Dijck, 2013)

This case most clearly illustrates how the *popularity principle* operates cumulatively. Every new comment including a simple question such as "where is this?" registers as an interaction signal that extends the video's lifespan in other users' feeds. A video with 1.5 million views did not reach that figure because 1.5 million people actively searched for "*jaranan ricuh*" it did so because each wave of interaction triggered a new wave of distribution. The platform never halts distribution as long as interaction continues to flow; and *jaranan* art is continuously being introduced to millions of new users through the face of its riots.

Sample 4: TikTok Content Pattern Keyword "Kesenian Rusuh" ["Traditional Arts Riot"]

Content characteristics

Unlike YouTube, which is built around longform video, TikTok distributes short clips (15 seconds to 3 minutes). Content associated with the keyword "*Kesenian Rusuh*" on TikTok typically takes the form of clips excerpted from alreadyviral YouTube videos, reedited with dramatic sound effects, provocative text overlays, and background music that heightens tension. This format enables the same riot footage to be redistributed to a different, younger audience stripped of everdiminishing original context.

Representative comment patterns

Comments on TikTok tend to be shorter and more reactive than those on YouTube, dominated by immediate emotional responses: shocked, laughing, or angry emoji. This pattern is consistent with Cheng & Li's (2024) finding that negative sentiment in TikTok content significantly generates higher user engagement than neutral or positively valenced content. Analytically, the most significant feature is TikTok's "duet" and "stitch" mechanisms functions that allow users to respond to a video with a new video of their own enabling a

single *jaranan* riot incident to become source material for dozens of derivative pieces of content, each one extending the reach of the perception distortion further.

How the popularity principle operates (Van Dijck, 2013)

TikTok represents the most extreme manifestation of the *popularity principle*: its algorithm does not merely elevate content based on interaction, but actively predicts and constructs users' emotional engagement landscapes based on microtemporal behavioral signals such as watch duration, pauses, and replays (Salles, 2025). This means that a user who has watched a single *jaranan* riot video will continue to receive recommendations for similar content. Zannettou et al. (2024) confirm that the "like" feature and watch duration are the strongest factors shaping TikTok's recommendations meaning a single initial emotional reaction to a riot video is sufficient to construct an increasingly dense chain of negative content recommendations, with no culturally positive content ever entering that recommendation loop.

Sample 5: The Kangen Band Concert Case "Andika Kangen Band Shouting 'Kampung' at Concert" (TikTok)

Content characteristics

This sample concerns pop music rather than traditional arts but is included as a crucial comparative reference. In the video, vocalist Andika halts the performance after a riot breaks out and rallies the audience to collectively chant the word "*kampung*" (boorish, uncouth) at the perpetrators. The tactic succeeds in defusing the situation and the show resumes. The video went viral not because of the riot itself, but because of the vocalist's unexpected creative response to it.

Representative comment patterns

Strikingly different from the four preceding samples, the Kangen Band video's comments are dominated by positive appreciation and humor. Analytically most significant is a cluster of comments that spontaneously invoke negative comparisons to *jaranan* demonstrating that the perception "*jaranan* always ends in a riot" has become sufficiently ingrained to function as a cultural reference point even in a context that has nothing to do with *jaranan* at all.

How the popularity principle operates (Van Dijck, 2013)

The Kangen Band case demonstrates that the *popularity principle* can operate in a different direction when what goes viral is a creative response rather than the incident itself. More analytically important, however, is what the comments reveal: the distortion of perception toward traditional arts has become sufficiently established to surface spontaneously in unrelated spaces. This constitutes evidence that the *popularity principle* does not operate only within a single video, but constructs longterm cultural associations that function across platforms and across contexts.

The Consequences of Distortion: Social and Economic Impact

The pattern of distortion identified across the five samples does not remain at the level of perception it produces concrete consequences measurable in social and economic terms. From a social standpoint, the accumulation of widely circulated riot content generates collective stereotypes: *jaranan* audiences become associated with disorder, and *jaranan* art becomes associated with violence. These stereotypes are spontaneously reproduced even in unrelated contexts, as evidenced by the comments on the Kangen Band video (Bourdieu, 1993).

From an economic standpoint, the impact is direct. Property damage, event cancellations, and ticket refunds constitute immediate financial losses. Deeper still is the longterm reputational damage: event organizers report difficulty obtaining permits and sponsorship following a viral riot incident, as potential partners fear having their name associated with events that have already been spread across millions of screens. A single 30second incident reaching 1.5 million views as in Video 3 is capable of producing reputational consequences far exceeding those of a single performance. This damage is compounded by the mechanism of the *popularity principle* (Van Dijck, 2013): the platform continues to distribute the video as long as interaction flows, causing old incidents to be discovered continuously by new users, sometimes months after the event. Milli et al. (2025) confirm that engagementbased algorithms consistently amplify negatively charged emotional

content, meaning riot footage not only goes viral in the short term but also persists longer within digital circulation. Hong (2022) adds that the distribution of cultural content through digital media frequently confronts an imbalance between economic and cultural value, wherein content that generates clicks spreads more easily than content rich in meaning.

Reinforcing Factors: Social and Psychological Dimensions

The algorithmic distortion of perception does not operate in a vacuum it operates upon ground already prepared by social and psychological factors on the audience's side. According to social conflict theory, audience dissatisfaction with event organization including unmanaged crowd density, ticket prices perceived as unreasonable, or inadequate facilities can generate latent tensions that readily ignite into incidents (Raya et al., 2024). It is precisely these tensions that are then recorded, uploaded, and become fuel for algorithmic distribution.

Bandura's social cognitive theory adds a further dimension: crowd behavior in large gatherings is socially contagious. When one individual initiates a provocation and event organizers do not intervene swiftly, that behavior can be imitated by others in the crowd (Yanuardianto, 2019). What is essential to understand is that these social and psychological factors explain why incidents occur on the ground but Van Dijck's (2013) *popularity principle* explains why those incidents subsequently become public perceptions that vastly exceed the original scale of the events. The two mechanisms are distinct and must be addressed through distinct means.

Spaces of Resistance: Reconstructing Narrative in the Digital Arena

Amid the dominance of algorithmically amplified negative narratives, spaces of resistance exist that must be identified and strengthened. Understanding how the *popularity principle* works is precisely what opens a path to deploying it strategically in the service of preservation.

At the individual level, every action that generates interaction with culturally substantive traditional art content watching a video through to completion, leaving a substantive comment, sharing within one's network constitutes an algorithmic signal running counter to those produced by riot content. The Kangen Band case demonstrates that creative content capable of eliciting positive reactions can also go viral: an intelligent response to a riot garners algorithmic distribution just as substantial as the riot itself. This is a gap that artists and organizers of traditional arts events can actively exploit.

At the level of government and cultural institutions, what is required is not only conventional preservation programmes, but also digital literacy regarding the workings of algorithms for traditional arts communities. A content strategy designed with awareness of the *popularity principle* not working against the algorithm, but alongside it is the most concrete and immediately applicable instrument of preservation available. Social media campaigns that document the creative process, ritual significance, and philosophical values underpinning *jaranan*, *barongan*, or *gandrung* performances hold equally significant distribution potential, provided they are designed to elicit curiosity, admiration, or substantive discussion (Syidqi, 2022a; 2022b).

6. Conclusions

This study demonstrates that the distortion of public perception toward traditional arts is not merely a consequence of riots that occur on the ground; it is a product of a systematic algorithmic mechanism. Through the analysis of five social media content samples, it is evident that the *popularity principle* (Van Dijck, 2013) operates consistently: content that elicits strong emotional reactions receives distribution far exceeding that of culturally rich content. The result is a public perception built not from direct experience of traditional arts, but from clips of a few seconds' duration, selected and circulated by algorithms because they generate the highest interaction.

The social and economic consequences of this distortion are real: collective stereotypes associating traditional arts with violence, longterm reputational damage for event organizers, and declining public participation in traditional art performances. More alarmingly, as evidenced by the comments on the Kangen Band video, these negative associations have become sufficiently entrenched to surface spontaneously in unrelated contexts signaling the operation of a deeply rooted cultural stereotype.

Yet understanding how the *popularity principle* works also opens a path toward strategic resistance. Algorithms are indifferent to whether highly engaging content is negative or positive what they read is volume alone. This means traditional art content designed with awareness of platform dynamics content crafted to elicit curiosity, admiration, or substantive discussion holds equally significant distribution potential. The challenge is to build an organized and consistent ecosystem of cultural content: one that demands collaboration between artists, communities, and government as active producers of cultural narrative in the digital space.

References

- Bourdieu, P. (1993). *The field of cultural production*. Columbia University Press.
- Cheng, Z., & Li, Y. (2024). Like, comment, and share on TikTok: Exploring the effect of sentiment and secondperson view on the user engagement with TikTok news videos. *Social Science Computer Review*, 42(1), 162–179. <https://doi.org/10.1177/08944393231178603>
- Fadilan, M. R., et al. (2025). Digitalisasi tradisi budaya melalui platform media baru [Digitalization of cultural traditions through new media platforms]. *Interaction: Communication Studies Journal*. <https://doi.org/10.51625/interaction.v4i1.4283>
- Hong, N. (2022). Digitalmediabased interaction and dissemination of traditional culture integrating using social media data analytics. *Wireless Communications and Mobile Computing*, 2022, 5846451. <https://doi.org/10.1155/2022/5846451>
- Hua, Y., Ding, L., Dong, H., & Lin, Z. (2024). Influence of usergenerated content (UGC) in social media on the intangible cultural heritage preservation of Gen Z tourists in the digital economy era. *International Journal of Tourism Research*, 26, e2743. <https://doi.org/10.1002/jtr.2743>
- Metzler, H., & Garcia, D. (2024). Social drivers and algorithmic mechanisms on digital media. *Perspectives on Psychological Science*, 19(5), 735–748. <https://doi.org/10.1177/17456916231185057>
- Milli, S., Carroll, M., Pandey, S., Wang, Y., & Dragan, A. D. (2025). Engagement, user satisfaction, and the amplification of divisive content on social media. *PNAS Nexus*, 4(3), pgaf062. <https://doi.org/10.1093/pnasnexus/pgaf062>
- Morini, V., et al. (2025). The broadcasting trap: TikTok and the "democratization" of digital content production. *Humanities and Social Sciences Communications*, 12, 458. <https://doi.org/10.1057/s4159902504797w>
- Raya, D., et al. (2024). Sumber kekuasaan dalam negara: Analisis berdasarkan teori konflik Karl Marx [Sources of power within the state: An analysis based on Marxist conflict theory]. *Jurnal Sosial Politik, Pemerintahan dan Hukum*, 3(2), 33–39.
- Salles, J. (2025). Affect and prediction in shortvideo social media recommendation algorithm: TikTok and the missing halfsecond. *New Media & Society*. <https://doi.org/10.1177/14614448251385086>
- Susanti, S., & Koswara, I. (2024). Pemertahanan warisan budaya bangsa melalui seni tradisional [Sustaining national cultural heritage through traditional arts]. *Akrab Juara: Jurnal Ilmu Sosial*, 9(3), 939–951.
- Sutisna, N., & Seminingrat, R. D. A. (2024). Seni tradisional di era digital dan upaya Sanggar Sawo Kecik dalam melestarikan tari topeng Cirebon dengan pendekatan semiotik [Traditional arts in the digital era and Sanggar Sawo Kecik's efforts to preserve the Cirebon mask dance through a semiotic approach]. *Multikultura*, 3(4), 741–754.
- Syidqi, M. A. (2022a). Angklung Banyuwangi di era disrupsi internet dan teknologi digital [Angklung Banyuwangi in the era of internet disruption and digital technology]. *Nusantara Institute*. <https://www.nusantarainstitute.com/angklungbanyuwangidieradisrupsiinternetdanteknologidigital/>
- Syidqi, M. A. (2022b). Virtualisasi seni: Tinggalan pandemi yang semakin masif [The virtualization of art: A pandemic legacy of growing scale]. *Nusantara Institute*. <https://www.nusantarainstitute.com/virtualisasisenitinggalanpandemiyangsemakinmasif/>
- Syidqi, M. A. (2023). Kerusuhan di panggung seni tradisi Jawa [Riots on the stage of Javanese traditional arts]. *Etnis.id*. <https://etnis.id/kerusuhandipanggungsensitradisijawa/>
- Van Dijck, J. (2013). *The culture of connectivity: A critical history of social media*. Oxford University Press.
- Van Dijck, J., & Poell, T. (2013). Understanding social media logic. *Media and Communication*, 1(1), 2–14. <https://doi.org/10.17645/mac.v1i1.70>
- Wiyogo, P., et al. (2024). Seni tradisi Indonesia dan tantangan masyarakat global [Indonesian traditional arts and the challenges of global society]. *Grenek: Jurnal Seni Musik*, 13(1), 107–113. <https://doi.org/10.24114/grenek.v13i1.57012>
- Yanuardianto, E. (2019). Teori kognitif sosial Albert Bandura: Studi kritis dalam menjawab problem pembelajaran di MI [Albert Bandura's social cognitive theory: A critical study addressing learning problems in Islamic elementary schools]. *Jurnal Auladuna*, 1(2), 94–111.
- Zannettou, S., et al. (2024). Analyzing user engagement with TikTok's short format video recommendations using data donations. In *Proceedings of the CHI Conference on Human Factors in Computing Systems (CHI '24)*. <https://doi.org/10.1145/3613904.3642433>
- Zhang, M., et al. (2024). Analysis of contemporary value and influence of intangible cultural heritage based on online review mining. *PLOS ONE*, 19(12), e0315805. <https://doi.org/10.1371/journal.pone.0315805>