Beyond Engagement: Rethinking Media Effects in an Era of Infinite Feeds

Handoko

Faculty of Humanities, Universitas Andalas, Padang, Indonesia

Article information	Abstract
	Infinite feeds have conditioned us to think of engagement metrics — such as clicks, views, and watch time — as a shorthand for media efficacy. But participation is a behavioral proxy, not a societal endpoint. This editorial review reframes a media effects research agenda in terms more suitable for exposure–experience–effect and further proposes a pragmatic approach that incorporates equity and public value, in addition to impact. (1) situate engagement in historical and recent effects lines of thinking, (2) diagnose methodological and ethical limitations to a focus on one's audience as a measurable object, (3) offer an alternative triad of measurement–mechanism–meaningful change and a four-family schema for outcomes including informational quality, personal well-being, civic capacity, and cultural agency; (4) provide mixed-methods designs along with subgroup approaches for causal inference and distributional harms; and (5) translate the rethinking into checklists for authors, reviewers, and designers. We contend that the role of media-effects research is to inform us about what changes, for whom, and at what cost, not just how long attention can be held. The article concludes with standards and statements that can be adopted directly into editorials.

INTRODUCTION

The contemporary media landscape is built upon an architectural bet: if platforms can keep people engaged — measured through clicks, views, watch time, session length, dwell time, and return frequency — value will eventually follow. Infinite feeds make this bet concrete on a planetary scale, haunting an eternal present in which content vies for slots within ranked attention micro-slots (Paasonen, 2016; Törnberg & Uitermark, 2021; Zhou et al., 2021). Yet, engagement is not a result; it's a behaviorally convenient substitute. To understand the effects of media in an era of infinite scroll, we must overcome the gravitational pull of "more time spent" and consider the cumulative impact on cognition, affect, relationships, culture, and institutions. The feed isn't just a delivery mechanism; it's a theory of change snuck into design, an attempt to hijack the functions of human preference for shallow engagement, stunting our capacity for deeper meaning or more complex reasoning that won't lead directly to big tech's bottom line. Revisiting media effects in this context entails questioning what we count, how we infer, and whose outcomes matter.

RETHINKING MEDIA EFFECTS IN AN ERA OF INFINITE FEEDS

Classic media-effects traditions are helpful guideposts but stretch against platform logics (Bode & Vraga, 2017; Klinger & Svensson, 2015). There is also still a public agenda-setting role (i.e., however algorithmically curated) around the salience of issues, but it is personalized and dynamic by nature, making a singular public's agenda less coherent. Cultivation theory's focus on long-run worldview formation does still aid our understanding of why cynicism or fear may settle (Morgan et al., 2017; Shrum, 2017), but the feed's confluence of entertainment, commentary, and interpersonal connection makes it hard to sustain the idea of a stable "television world." Uses and gratifications properly foreground active audiences, yet contemporary agency is already hinged on recommendations, default autoplay, and signals

from social media. The differential susceptibility model predicts heterogeneity—some users being more susceptible to specific effects—but the factors driving susceptibility now include model error, linguistic undercoverage, and sociotechnical asymmetries hardwired into interfaces (Hartman & Belsky, 2015; Valkenburg & Peter, 2013). In a way, platforms hybridize effects: They determine what we see and how, who we see it with, and what seeing does to our status, our labor, and our identity.

Engagement-centered analytics flatten these dynamics. A minute viewed can express pleasure, outrage, the tedium of a line, or the mere tyranny of autoplay. Click-throughs might be driven by curiosity, moral outrage, or a desire to gain context. When platforms treat input actions as the sufficient statistics of value, they equate attention with gain and conflate visibility with influence. This comes at both methodological and ethical expense. Methodologically, researchers trip the wire of tautology: The algorithm boosts what it predicts will be clicked; researchers observe that things were clicked a lot and infer "appeal," which the model then learns to do even better — an echo of the system's own priors (Baeza-Yates, 2020; He et al., 2014; Kleinberg et al., 2023). There's an ethical dimension here: optimizing for engagement can elevate sticky content by exploiting cognitive biases, such as those related to grief or stigma. A feed optimized for maximizing watch time can provide a quantifiable lift in "engagement" even as it erodes well-being, warps norms or directs harm at vulnerable groups.

A more beneficial approach begins by separating exposure, experience, and effect. Exposure questions what could potentially have been encountered and experienced. Experience is an examination of the phenomenology of consumption: what did the user think they were doing, how did it affect them, and how do content producers interact with their goals or weaknesses? Effect refers to subsequent alterations in knowledge, beliefs, feelings, behavior, and relationships. Unbounded practice pools to reduce this into a single number. Researchers should deliberately unbundle them. Exposure can be reconstructed through trace, content audits, and simulated recommendation probes. Experience necessitates diaries, prompts, and qualitative methods that attend to sense-making. Effects demand information designs that connect the dots across time, from interrupted time series to ethnographic follow-up, natural experiments to participatory evaluation. Mixed methods are not decorative; it is the only mechanism to glimpse what engagement cannot.

So, what should we measure beyond engagement as the master metric? Begin with four families of possible outcomes. First, quality of information: accuracy or calibration of beliefs, resistance to misinformation, contextual understanding, as well as the variety and heterogeneity of origin (Ecker et al., 2022; Jadbabaie et al., 2013). Second, psychosocial well-being: affect during and after the sessions, social comparison pressure prevalence, perceived autonomy versus compulsion to play, and media-related interpersonal relationships (Granow et al., 2018; Van Den Eijnden et al., 2018). Third, civic capacity: Public interest, cross-cutting discussion, willingness to cooperate, and trust in institutions and one another (Page, 2015; Shinn, 1999). Fourth, cultural agency: places for self-representation, creative authorship, and the circulation of less-heard stories. These constructs are more difficult to measure than likes and views, but they bring us closer to what societies truly care about. They also bring to the surface trade-offs: a design that improves short-term engagement may suppress cross-group contact or increase rumination; a ranking shift that diminishes harmful sensationalism might decrease raw watch time but improve information integrity.

Causality can be particularly tricky in infinite feed systems. Randomized platform experiments can reveal "average treatment effects," but they often rely on proximal proxies because the most relevant distal variables are too slow or politically sensitive to be measured in real time. Observational studies rely on instrumental variables, difference-in-differences, or synthetic controls when platforms change policies, but such settings are not common and are confounded by exogenous events. Various forms of ethnography and qualitative interviews provide mechanism-rich accounts but are vulnerable to criticisms regarding generalizability (Sharma, 2020; Sykes et al., 2017). The field ought to embrace consilience: triangulating

across methods and coming to terms with the idea that different kinds of evidence support different kinds of claims. One way to do so is through the "measurement–mechanism–meaning" triad: matching quantitative exposure/effect estimates with what interventions or contexts do in terms of mechanism tracing (e.g., how design nudges influence help-seeking) and lived meaning (e.g., what creators and viewers think is at stake). Based on these vertices, the combination of the two approximations converges to a more accurate inference than any one method alone can provide.

Equity shifts our thinking about the effects of media from the mean to the spread. Infinite feeds are not neutral highways; they are biased infrastructures with lanes of unequal width. By region, class, and ability, there is a discrepancy in language coverage, moderation capacity, creator monetization rules, and device restrictions. The same intervention — say, down-ranking borderline content — can shield mainstream users while disproportionately muzzling dialects that classifiers misread as toxic. Equity evaluation tools should include subgroup exposure research, fairness audits of ranking and moderation, accessibility scrutiny to benchmarks, and participatory accountability with those affected to define goals and make sense of findings. Equity is not just about preventing differential harms, but also about affording group positive impacts—access to knowledge, community, and cultural production—for those historically starved for media recognition and value capture.

Public value introduces another corrective. Platforms are engineered to maximize private gain — ad revenue, retention — while externalizing social costs. Research that only reports the dynamics of engagement risks missing the opportunity for optimization. It is public value that seeks to answer the question "what designs, what policies promote collective goods: trustworthy information, an inclusive culture, safety with dignity, and sustainable infrastructures." Assessing public value looks to broaden the evidence base to encompass policy uptake, community co-governance, open documentation, and energy or maintenance footprints. Infinite feeds are taking on compute and attention, both finite social resources. A ranking change that saves people time, reduces spirals of harmful content, and creates an auditable record of trade-offs is a greater contribution to public value than one that increases engagement (Germano et al., 2022; Golbeck, 2020; Milli et al., 2025).

Rethinking media effects further requires some humility about interpretation. The same exposure can have inverse effects, depending on context: doomscrolling at midnight may drive home the notion that if you don't worry about a crisis, it's not real; skimming reassurances from your trusty flood updates may boost both capacities to act and sense of preparedness. Research should also articulate the scope conditions it believes hold for magic bullet varieties and avoid making universal claims to "social media" that treat all platforms as equivalent. They are not: Short-form video is not the same thing as messaging apps; youth subcultures are not professional communities; algorithmic affordances do not map onto local norms. Reporting should separate descriptive patterns from causal claims and normative judgments, making it clear where the evidence ends and our values begin.

So, what should authors actually do? Start with the questions that matter— misinformation resilience, cross-group understanding, learner agency, creator well-being — and then build metrics that answer those questions rather than reaching for whatever heuristics are at hand. Provide provenance for documents sampled, and the behavior of models in a manner that others can audit claims; when data cannot be shared, share redacted code, or synthetic examples produced under your model. Break down results by relevant groups, report on the uncertainty in the outcome, and let stakeholders guide the selection and interpretation of measures. Wherever possible, compare design alternatives that are optimized for engagement with alternatives optimized for well-being or civic empowerment; Is there a trade-off—can we report it transparently?" Ultimately, we need to translate the findings into actionable levels — such as policy recommendations, design principles, and educator guides — so that research leaves the lab and enters society.

CONCLUSION

The age of infinite feeds encourages this confusion between ease of counting and meaning of counted. Engagement will continue to be a helpful signal for attention, but it's a lousy proxy for knowledge, welfare or democratic health. Media-effects research that views engagement as the dependent variable runs the risk of refining "the dashboard of a ship that is on the wrong course." A more nuanced framework, sensitive to exposure and experience, to the effects and equity of the public value at stake, to mechanisms and meanings, can help guide us toward the social outcomes that societies truly want. In a media environment where it feels like feeds go on forever, the measures we take should be discriminating and principled, while our inferences are cautious, plural, and shaped toward the human purposes that make media matter at all.

REFERENCES

Baeza-Yates, R. (2020). Bias in Search and Recommender Systems. In *Proceedings of the 14th ACM Conference on Recommender Systems*. https://doi.org/10.1145/3383313.3418435

Bode, L., & Vraga, E. K. (2017). Studying politics across media. *Political Communication*, *35*(1), 1–7. https://doi.org/10.1080/10584609.2017.1334730

Ecker, U. K. H., Lewandowsky, S., Cook, J., Schmid, P., Fazio, L. K., Brashier, N., Kendeou, P., Vraga, E. K., & Amazeen, M. A. (2022). The psychological drivers of misinformation belief and its resistance to correction. *Nature Reviews Psychology*, *1*(1), 13–29. https://doi.org/10.1038/s44159-021-00006-y

Germano, F., Gómez, V., & Sobbrio, F. (2022). Crowding out the truth? A simple model of misinformation, polarization and meaningful social interactions. *arXiv (Cornell University)*. https://doi.org/10.48550/arxiv.2210.02248

Golbeck, J. (2020). Optimizing for engagement can be harmful. there are alternatives. *IEEE Intelligent Systems*, *35*(4), 117–118. https://doi.org/10.1109/mis.2020.3005577

Granow, V. C., Reinecke, L., & Ziegele, M. (2018). Binge-Watching and Psychological Well-Being: Media use between lack of control and perceived autonomy. *Communication Research Reports*, *35*(5), 392–401. https://doi.org/10.1080/08824096.2018.1525347

Hartman, S., & Belsky, J. (2015). An Evolutionary Perspective on Family Studies: Differential susceptibility to environmental influences. *Family Process*, *55*(4), 700–712. https://doi.org/10.1111/famp.12161

He, X., Pan, J., Jin, O., Xu, T., Liu, B., Xu, T., Shi, Y., Atallah, A., Herbrich, R., Bowers, S., & Candela, J. Q. (2014). Practical Lessons from Predicting Clicks on Ads at Facebook. In *Proceedings of the Eighth International Workshop on Data Mining for Online Advertising* (pp. 1–9). https://doi.org/10.1145/2648584.2648589

Jadbabaie, A., Molavi, P., & Tahbaz-Salehi, A. (2013). Information heterogeneity and the speed of learning in social networks. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.2266979

Kleinberg, J., Ludwig, J., Mullainathan, S., & Raghavan, M. (2023). The inversion problem: why algorithms should infer mental state and not just predict behavior. *Perspectives on Psychological Science*, *19*(5), 827–838. https://doi.org/10.1177/17456916231212138

Klinger, U., & Svensson, J. (2015). Network Media LOGIC. In *Routledge eBooks* (pp. 23–38). https://doi.org/10.4324/9781315716299-3

Milli, S., Carroll, M., Wang, Y., Pandey, S., Zhao, S., & Dragan, A. D. (2025). Engagement, user satisfaction, and the amplification of divisive content on social media. *PNAS Nexus*, *4*(3). https://doi.org/10.1093/pnasnexus/pgaf062

Morgan, M., Shanahan, J., & Signorielli, N. (2017). Cultivation Theory: idea, topical fields, and Methodology. *The International Encyclopedia of Media Effects*, 1–14. https://doi.org/10.1002/9781118783764.wbieme0039

Paasonen, S. (2016). Fickle focus: Distraction, affect and the production of value in social media. *First Monday*. https://doi.org/10.5210/fm.v21i10.6949

Page, S. (2015). A strategic framework for building civic capacity. *Urban Affairs Review*, *52*(4), 439–470. https://doi.org/10.1177/1078087415596848

Sharma, D. (2020). Ethics and generalizability in qualitative research. In *Routledge eBooks* (pp. 6–29). https://doi.org/10.4324/9780429270260-2

Shinn, C. W. (1999). Civic Capacity: theory, research and practice. *Administrative Theory & Praxis*, *21*(1), 103–119. https://doi.org/10.1080/10841806.1999.11643352

Shrum, L. J. (2017). Cultivation Theory: Effects and underlying processes. *The International Encyclopedia of Media Effects*, 1–12. https://doi.org/10.1002/9781118783764.wbieme0040

Sykes, B. L., Verma, A., & Hancock, B. H. (2017). Aligning sampling and case selection in quantitative-qualitative research designs: Establishing generalizability limits in mixed-method studies. *Ethnography*, *19*(2), 227–253. https://doi.org/10.1177/1466138117725341

Törnberg, P., & Uitermark, J. (2021). Tweeting ourselves to death: the cultural logic of digital capitalism. *Media Culture & Society*, *44*(3), 574–590. https://doi.org/10.1177/01634437211053766

Valkenburg, P. M., & Peter, J. (2013). The differential susceptibility to media Effects model. *Journal of Communication*, *63*(2), 221–243. https://doi.org/10.1111/jcom.12024

Van Den Eijnden, R., Koning, I., Doornwaard, S., Van Gurp, F., & Ter Bogt, T. (2018). The impact of heavy and disordered use of games and social media on adolescents' psychological, social, and school functioning. *Journal of Behavioral Addictions*, *7*(3), 697–706. https://doi.org/10.1556/2006.7.2018.65

Zhou, Y., Calder, B. J., Malthouse, E. C., & Hessary, Y. K. (2021). Not all clicks are equal: detecting engagement with digital content. *Journal of Media Business Studies*, *19*(2), 90–107. https://doi.org/10.1080/16522354.2021.1924558