

## AI, PEERS, AND SUPERVISORS: EPISTEMIC AUTHORITY IN POSTGRADUATE SUPERVISION

Antonius Setyawan Sugeng Nur Agung, Monika Widyastuti Surtikanti, Masfa Maiza, Doni Alfaruqy, Imam Baihaqi, Rizki Ramadhan, Daniel Jesayanto Jaya, Diana Zulita Antonius Setyawan Sugeng Nur Agung<sup>1\*</sup>, Monika Widyastuti Surtikanti<sup>2</sup>, Masfa Maiza<sup>3</sup>, Doni Alfaruqy<sup>4</sup>, Imam Baihaqi<sup>5</sup>, Rizki Ramadhan<sup>6</sup>, Daniel Jesayanto Jaya<sup>7</sup>, Diana Zulita<sup>8</sup>  
Universitas Katolik Santo Agustinus Hippo<sup>1,2</sup>  
Universitas Satu Nusa Lampung<sup>3</sup>  
Institut Teknologi Sumatera<sup>4</sup>  
Universitas Tidar<sup>5</sup>  
Universitas Negeri Surabaya<sup>6</sup>  
Universitas Negeri Jakarta<sup>7</sup>  
SMP Negeri Unggulan Saruma<sup>8</sup>

a.agung@sanagustin.ac.id, m.surtikanti@sanagustin.ac.id, masfamaiza27@gmail.com, doni.alfaruqy@pariwisata.itera.ac.id, imam.pbsi@untidar.ac.id, rizkiramadhan@unesa.ac.id, danieljesayantojaya@unj.ac.id, dianaspd40@guru.smp.belajar.id

Submitted: 2026-02-16

Accepted: 2026-03-04

---

**Abstract:** The swift incorporation of generative artificial intelligence (AI) into higher education has altered postgraduate academic procedures; yet, there is limited understanding of how students perceive AI in relation to traditional academic authority throughout the preparation of thesis proposals. This study examines how postgraduate students establish and rank AI, peers, and supervisors as epistemic authority in an AI-mediated academic context. Using a qualitative interpretive methodology, data were gathered from 105 postgraduate students through semi-structured interviews focusing on cognitive engagement, emotional experience, and authority positioning. Reflexive thematic analysis uncovered a layered epistemic hierarchy. AI served as a pivotal authority that improved cognitive efficiency and diminished initial ambiguity, yet necessitated validation. Peers functioned as relational authorities, offering dialogic enhancement and emotional support. Supervisors maintained the highest epistemic authority as institutional figures owing to their evaluative power, responsibility, and symbolic capital within formal academic frameworks. The results suggest that although generative AI transforms initial intellectual tasks, it does not undermine supervisory authority. Epistemic authority in postgraduate supervision rests on institutional recognition rather than on technological expertise. These findings advance the discourse on AI governance by redirecting focus from usage frequency to the structuring of power in higher education.

Keywords: *AI-mediated supervision, epistemic authority, generative AI, institutional legitimacy, postgraduate supervision*

---

## INTRODUCTION

The swift adoption of generative artificial intelligence (AI) in higher education has transformed the ways postgraduate students begin, advance, and enhance their academic work. Instruments like ChatGPT may produce study subjects, synthesize literature, and formulate organized arguments instantaneously. Since its public debut in 2022, research has predominantly focused on generative AI concerning academic integrity, ethical issues, productivity, and educational outcomes (Cotton et al., 2024; Dwivedi et al., 2023; Kasneci et al., 2023). Although these studies offer significant insights into responsible usage and pedagogical integration, they

seldom examine how postgraduate students hierarchically regard AI in relation to supervisors and peers as epistemic authorities during critical academic decision-making.

The formulation of a thesis proposal is not simply a procedural task but an epistemological and institutional endeavor. Students must exhibit conceptual clarity, methodological consistency, and disciplinary alignment when engaging with formal approval processes. Supervisors have evaluation authority and decide if projects go to the seminar or ethical clearance phases (Bastalich, 2017; Lee, 2008). Thus, postgraduate proposal writing functions inside organized frameworks of academic gatekeeping, wherein power, legitimacy, and accountability are institutionally ingrained.

Three conceptual areas are particularly essential for comprehending how students situate AI within this framework. Epistemic authority theory elucidates how individuals ascertain who has the authority to delineate valid information (Fricker, 2007) and Goldman (1999) contend that epistemic authority originates from socially acknowledged expertise and reliability. In academic situations, authority is predicated not merely on informational correctness but on acknowledged validity. Supervisors are recognized experts inside the school, and their evaluations have formal academic repercussions. Secondly, institutional power and symbolic capital elucidate the reasons for the continued existence of supervisory authority. Bourdieu (2018) defines symbolic capital as recognition ingrained in institutional frameworks. Supervisors wield institutional authority as their assessments are officially binding within university governance frameworks. Consequently, legitimacy is upheld by systemic means rather than through interpersonal negotiation. Third, the ideas of algorithmic trust and cognitive offloading elucidate how AI may still affect epistemic stance. Studies on automation trust indicate that users frequently depend on algorithmic systems when they regard them as efficient and dependable (Lee & See, 2004; Logg et al., 2019). The cognitive offloading theory posits that digital tools reduce cognitive burden and enhance idea generation (Risko & Gilbert, 2016). In the initial stages of proposal writing, generative AI can augment perceived control and diminish uncertainty, especially in high-stakes academic settings marked by achievement-related emotions (Pekrun, 2006).

While previous studies have examined AI's influence on productivity, writing anxiety, and ethical practices (Firat, 2023; Tlili et al., 2023), there has been little focus on how students allocate epistemic trust among AI, peers, and supervisors. Little is specifically known about whether AI undermines supervisory authority, enhances it, or assumes a subordinate role within the frameworks of academic legitimacy. This study examines the epistemic hierarchy established by postgraduate students during the preparation of thesis proposals. The study investigates how students distribute epistemic trust, rank knowledge sources hierarchically, and negotiate power configurations inside an AI-mediated context, rather than assessing the frequency of AI usage.

This study theorizes the configuration of authority in contemporary postgraduate supervision by integrating epistemic authority theory, institutional power frameworks, and research on algorithmic trust.

This study is guided by the following research question: In what manner do postgraduate students hierarchically rank AI, peers, and supervisors as epistemic authorities throughout the production of thesis proposals in an AI-mediated academic context?

## **METHOD**

### **Research Design**

The present study employed a qualitative interpretative framework grounded in constructivist epistemology. Authority, trust, and legitimacy were perceived as socially produced through interaction rather than as objectively quantifiable constructs (Crotty et al., 2020; Lincoln & Guba, 1985). The research employed a qualitative descriptive methodology with interpretative thematic analysis to investigate how postgraduate students formulate epistemic hierarchy throughout the production of thesis proposals. The study aimed to investigate how students narratively situate AI, peers, and supervisors within organized academic contexts, rather than monitoring the frequency of AI usage or quantifying attitudes. The design was theoretically grounded and inductive, facilitating the emergence of authority configuration patterns from participants' narratives (Merriam & Tisdell, 2015).

### **Research Context and Participants**

The study was conducted at a private university in Indonesia where postgraduate thesis proposals must receive formal supervisory approval before progressing to seminar presentation or ethical clearance. The institutional structure is characterized by clear hierarchical supervision procedures, written evaluation standards, and formalized consultation mechanisms. This structured governance context provided a relevant site for examining how epistemic authority is negotiated in high-stakes academic decision-making. Participants were one hundred and five postgraduate students enrolled in thesis proposal-writing courses in English Education and Applied Linguistics. All participants met three inclusion criteria: 1) Actively developing a thesis proposal, 2) Using generative AI tools (e.g., ChatGPT) during proposal preparation, and 3) Having engaged in formal supervisory consultation. Although the sample size may appear large for qualitative research, it was appropriate for two reasons. First, the study sought to capture variation in authority positioning across students with diverse academic focuses. Second, not all participants contributed equally extensive narrative data; depth was achieved through focused thematic analysis rather than case-based saturation. The sampling followed the principle of information power, whereby sample adequacy is determined by study aim, sample specificity, and analytic strategy (Malterud et al., 2016).

### **Data Collection**

Data were collected through semi-structured interviews. Interviews are suitable for exploring meaning-making processes, authority negotiation, and epistemic trust (Kvale, 2015). Each interview lasted between 45 and 60 minutes and was conducted in English or Indonesian, depending on the participant's preference. Interviews were audio-recorded with consent and transcribed verbatim. Indonesian excerpts were translated into English during analysis while preserving contextual meaning. The interview protocol covered three domains: Cognitive engagement (use of AI for idea generation and structuring), Emotional experience (confidence, uncertainty, anxiety), and Authority positioning (decision-making and final validation). Participants were also asked to rank AI, peers, and supervisors in terms of perceived authority during proposal development. Importantly, the ranking task was not intended to generate a numerical comparison. Instead, it functioned as a qualitative elicitation device, inviting participants to reflect on and narratively justify how they structured epistemic hierarchy among AI, peers, and supervisors. The ranking served as an entry point for deeper qualitative probing regarding legitimacy, trust, and final decision authority. Data collection continued until thematic sufficiency was reached, meaning no substantially new patterns of authority configuration emerged (Guest et al., 2006).

### **Data Analysis**

Data were analyzed using reflexive thematic analysis following Braun & Clarke (2006). The analysis proceeded through six stages: Familiarization with transcripts, Initial coding of authority-related statements, Development of candidate themes, Thematic review and refinement, Theoretical interpretation, and Narrative integration. Codes captured patterns related to instrumental use of AI, relational peer consultation, institutional validation, emotional regulation, and trust calibration. Themes were interpreted abductively (Timmermans & Tavory, 2012), allowing empirical insights to interact with theoretical constructs such as epistemic authority (Fricker, 2007; Goldman, 1999), symbolic capital (Bourdieu, 2018), and algorithmic trust (Lee & See, 2004). The analysis focused on how students hierarchically configured authority rather than on frequency counts or statistical comparisons.

## **FINDING AND DISCUSSION**

The analysis of questionnaire responses and interview transcripts indicated a systematic epistemic hierarchy in the development of postgraduate thesis proposals. The questionnaire data revealed overarching patterns in authority ranking and perceived credibility, whereas the interview narratives provided comprehensive explanations for students' hierarchical positioning

of AI, peers, and supervisors. Collectively, these data sources illustrate that authority was not equitably dispersed but structured hierarchically: AI as instrumental authority, peers as relational authority, and supervisors as institutional authority.

### **AI as Instrumental Authority**

Students uniformly indicated in their questionnaire responses that they used AI in the initial proposal phases for subject development, research question refinement, conceptual clarification, and language enhancement. Common replies included: “AI assists me in organizing my thoughts when I am at an impasse” (Q3) and “It facilitates the initiation process as I do not commence from scratch” (Q7). These results suggest that AI augmented perceived control and diminished early uncertainty. The interview narratives elucidated this functional positioning. A participant stated: “ChatGPT provided me with several selections while I was uncertain; nevertheless, I ultimately chose which one to utilize” (I4). Another remarked, “It resembles brainstorming with an individual who responds instantaneously” (I7). These narratives indicate that AI served as a cognitive support rather than as an ultimate authority.

This trend corresponds with cognitive offloading theory (Risko & Gilbert, 2016), wherein technological technologies transfer cognitive effort without supplanting human judgment. Students utilized AI for efficiency, organization, and idea enhancement; yet they did not confer evaluative authority on it. Concerns with falsified references (Q18) and the necessity for validation (I3) exemplify measured dependence (Lee & See, 2004). Consequently, AI held a subordinate yet functioning epistemic role: epistemically beneficial, but institutionally constrained.

### **Peers as Relational Authority**

Responses to the questionnaire revealed that numerous students sought peer consultation prior to formal supervisory meetings (Q9). Interviews revealed that peers provided dialogic enhancement and emotional support rather than formal affirmation. One participant remarked, “Friends enhance my confidence, although they do not determine the validity of my topic” (I5). Consequently, peers served as relational authority integrated into academic socialization processes (Gardner, 2008; A. Lee, 2008). Their authority was conversational rather than judgmental. Although peers aided in intellectual elucidation, their impact was primarily advising and preparatory. Within the hierarchical framework, peers served as mediators, offering support without being required to do so.

### **Supervisors as Institutional Authorities**

Both data sources consistently ranked supervisors at the apex of the epistemic hierarchy. The responses to the questionnaire highlighted that only supervisors possess the authority to formally

accept ideas (Q11, Q14). Interviews underscored this institutional precedence: “Without my supervisor’s authorization, I cannot advance to the seminar” (I2). In contrast to AI and colleagues, supervisors hold institutional legitimacy, symbolic capital (Bourdieu, 2018), and formal accountability. Their authority is inherently integrated within university governance frameworks. From an epistemic authority standpoint (Goldman, 1999; Zagzebski, 2013), supervisors are recognized as specialists whose evaluations carry academic ramifications. Legitimacy in this context is not solely cognitive but also institutional.

Significantly, students did not characterize AI as a rival to supervisory power. AI was designated as preliminary assistance that enhanced readiness for supervisory consultation. Supervisory endorsement ultimately mitigated epistemic uncertainty, especially in high-stakes situations aligned with Control–Value Theory (Pekrun, 2006).

### **Structured Epistemic Hierarchy**

The findings suggest that epistemic authority in the formation of postgraduate thesis proposals is structured hierarchically, rather than evenly divided among knowledge sources. In this hierarchy, AI functions as a pivotal authority, primarily augmenting cognitive efficiency by facilitating idea generation, structural organization, and preliminary conceptual clarity. Peers serve as relational authorities, providing dialogic enhancement, emotional support, and prepared feedback. Supervisors hold institutional authority, wield formal evaluative power, and carry accountability within established academic governance frameworks.

This layered arrangement illustrates that generative AI transforms initial cognitive tasks without undermining institutional oversight. While AI alters the methods by which students commence and organize intellectual endeavors, epistemic legitimacy continues to depend on institutional acknowledgment and formal validation processes. Instead of diminishing academic hierarchy, AI is assimilated into an already stratified framework of epistemic legitimacy, wherein cognitive support, relational interaction, and institutional validation function as separate yet interconnected tiers of authority.

### **CONCLUSION**

This study investigated the hierarchical positioning of AI, peers, and supervisors as epistemic authority by postgraduate students during the production of thesis proposals in an AI-mediated academic context. The findings indicate a hierarchical structure of knowledge where authority is stratified rather than uniformly allocated. AI serves as a pivotal tool that improves cognitive efficiency and facilitates preliminary concept exploration. Peers function as relational authorities, enabling dialogic elucidation and emotional reassurance. Supervisors hold the highest epistemic authority as institutional figures, endowed with formal evaluative power, responsibility, and

symbolic capital within academic governance frameworks. The research enhances theoretical comprehension by illustrating that generative AI transforms cognitive labor while preserving institutional supervisory authority. Although AI transforms the initiation, structuring, and refinement of intellectual labor, epistemic validity continues to rely on institutional acknowledgment rather than technological expertise. Authority in postgraduate supervision remains structurally entrenched, even as cognitive processes become progressively mediated by AI.

This research advances emerging studies on AI in higher education by redirecting analytical focus from usage frequency to authority configurations through a sociological lens. It presents a conceptual framework of tiered epistemic authority that distinguishes among the instrumental, relational, and institutional dimensions of legitimacy. This approach elucidates the integration of technology systems into established academic power structures, rather than their replacement. The findings indicate that institutions ought to transcend binary discussions of AI ban versus adoption and instead establish governance frameworks that recognize AI as a cognitive instrument operating within institutional accountability systems. Supervisors should enhance academic integrity and epistemic accountability by directly teaching students calibrated reliance and verification techniques.

Future research may investigate whether analogous authority configurations arise across various institutional contexts, disciplinary cultures, or national environments. Longitudinal research should further investigate whether the continuous integration of AI progressively alters perceptions of legitimacy and authority in postgraduate education. In summary, generative AI alters the allocation of cognitive effort without dismantling the fundamental framework of academic authority. Instead, it becomes integrated into a layered structure in which instrumental assistance, relational conversation, and institutional validation are analytically distinct yet hierarchically arranged.

## REFERENCES

- Bastalich, W. (2017). Content and Context in Knowledge Production: A critical review of doctoral supervision literature. *Studies in Higher Education*, 42(7). <https://doi.org/10.1080/03075079.2015.1079702>
- Bourdieu, P. (2018). The Forms of Capital. In *The Sociology of Economic Life, Third Edition*. <https://doi.org/10.4324/9780429494338>
- Braun, V., & Clarke, V. (2006). Qualitative Research in Psychology: Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2).
- Cotton, D. R. E., Cotton, P. A., & Shipway, J. R. (2024). Chatting and Cheating: Ensuring academic integrity in the era of ChatGPT. *Innovations in Education and Teaching International*, 61(2). <https://doi.org/10.1080/14703297.2023.2190148>

- Crotty, M., Shakespeare, W., & Henry, V. (2020). The Foundations of Social Research: Meaning and perspective in the research process. In *THE FOUNDATIONS OF SOCIAL RESEARCH: Meaning and perspective in the research process*.  
<https://doi.org/10.4324/9781003115700>
- Dwivedi, Y. K., Kshetri, N., Hughes, L., Slade, E. L., Jeyaraj, A., Kar, A. K., Baabdullah, A. M., Koohang, A., Raghavan, V., Ahuja, M., Albanna, H., Albashrawi, M. A., Al-Busaidi, A. S., Balakrishnan, J., Barlette, Y., Basu, S., Bose, I., Brooks, L., Buhalis, D., ... Wright, R. (2023). "So what if ChatGPT wrote it?" Multidisciplinary perspectives on opportunities, challenges and implications of generative conversational AI for research, practice and policy. *International Journal of Information Management*, 71.  
<https://doi.org/10.1016/j.ijinfomgt.2023.102642>
- Firat, M. (2023). What ChatGPT Means for Universities: Perceptions of scholars and students. *Journal of Applied Learning and Teaching*, 6(1).  
<https://doi.org/10.37074/jalt.2023.6.1.22>
- Fricker, M. (2007). Epistemic Injustice: Power and the Ethics of Knowing. In *Epistemic Injustice: Power and the Ethics of Knowing*.  
<https://doi.org/10.1093/acprof:oso/9780198237907.001.0001>
- Gardner, S. K. (2008). Fitting the mold of graduate school: A qualitative study of socialization in doctoral education. *Innovative Higher Education*, 33(2).  
<https://doi.org/10.1007/s10755-008-9068-x>
- Goldman, A. I. (1999). Knowledge in a Social World. In *Knowledge in a Social World*.  
<https://doi.org/10.1093/0198238207.001.0001>
- Guest, G., Bunce, A., & Johnson, L. (2006). How Many Interviews Are Enough?: An Experiment with Data Saturation and Variability. *Field Methods*, 18(1).  
<https://doi.org/10.1177/1525822X05279903>
- Kasneçi, E., Sessler, K., Küchemann, S., Bannert, M., Dementieva, D., Fischer, F., Gasser, U., Groh, G., Günemann, S., Hüllermeier, E., Krusche, S., Kutyniok, G., Michaeli, T., Nerdel, C., Pfeffer, J., Poquet, O., Sailer, M., Schmidt, A., Seidel, T., ... Kasneçi, G. (2023). ChatGPT for good? On opportunities and challenges of large language models for education. In *Learning and Individual Differences* (Vol. 103). <https://doi.org/10.1016/j.lindif.2023.102274>
- Kvale, S., & B. (2015). Interviews: Learning the craft of qualitative research interviewing (3rd ed.). In *Bloomsbury Academic*.
- Lee, A. (2008). How are doctoral students supervised? Concepts of doctoral research supervision. *Studies in Higher Education*, 33(3).  
<https://doi.org/10.1080/03075070802049202>
- Lee, J. D., & See, K. A. (2004). Trust in Automation: Designing for Appropriate Reliance. *Human Factors: The Journal of the Human Factors and Ergonomics Society*, 46(1). <https://doi.org/10.1518/hfes.46.1.50.30392>
- Lincoln, Y. S., & Guba, E. G. (1985). Establishing trustworthiness. *naturalistic inquiry. Purpose Meets Execution*, 289(331).
- Logg, J. M., Minson, J. A., & Moore, D. A. (2019). Algorithm appreciation: People prefer algorithmic to human judgment. *Organizational Behavior and Human Decision Processes*, 151. <https://doi.org/10.1016/j.obhdp.2018.12.005>
- Malterud, K., Siersma, V. D., & Guassora, A. D. (2016). Sample Size in Qualitative Interview Studies: Guided by Information Power. *Qualitative Health Research*, 26(13). <https://doi.org/10.1177/1049732315617444>

- Merriam, S. B., & Tisdell, E. J. (2015). Mining data from documents and artifacts. In *Qualitative research: A guide to design and implementation* (Vol. 2, Issue 2).
- Pekrun, R. (2006). The control-value theory of achievement emotions: Assumptions, corollaries, and implications for educational research and practice. *Educational Psychology Review*, 18(4). <https://doi.org/10.1007/s10648-006-9029-9>
- Risko, E. F., & Gilbert, S. J. (2016). Cognitive Offloading. In *Trends in Cognitive Sciences* (Vol. 20, Issue 9). <https://doi.org/10.1016/j.tics.2016.07.002>
- Timmermans, S., & Tavory, I. (2012). Theory construction in qualitative research: From grounded theory to abductive analysis. *Sociological Theory*, 30(3). <https://doi.org/10.1177/0735275112457914>
- Tlili, A., Shehata, B., Adarkwah, M. A., Bozkurt, A., Hickey, D. T., Huang, R., & Agyemang, B. (2023). What if the devil is my guardian angel: ChatGPT as a case study of using chatbots in education. *Smart Learning Environments*, 10(1). <https://doi.org/10.1186/s40561-023-00237-x>
- Zagzebski, L. T. (2013). Epistemic Authority: A Theory of Trust, Authority, and Autonomy in Belief. In *Epistemic Authority: A Theory of Trust, Authority, and Autonomy in Belief*. <https://doi.org/10.1093/acprof:oso/9780199936472.001.0001>