



Exploring the Lived Experiences of Toxic Friendships Among University Students in Campus Social Networks: A Phenomenological Approach

Muh. Arifin ^{1*}, Andi Muspida ²

¹Universitas Hasanuddin, Indonesia

²Universitas Bosowa, Indonesia

arifin.abidin@gmail.com*, andimuspida63@gmail.com

Article Info

Article history:

Received 30-07-2025

Revised 19-09-2025

Accepted 24-09-2025

Keyword:

Toxic Friendships, University Students, Lived Experience, Peer Relationships, Social Networks, Phenomenological Study

ABSTRACT

Interpersonal relationships among university students represent a critical area within social and psychological sciences, particularly in understanding how peer dynamics influence emotional well-being. While friendships are generally seen as sources of support, emerging research reveals that toxic friendships—characterized by manipulation, exclusion, and emotional strain—are a significant yet understudied phenomenon in campus social environments. However, little is known about how students internally experience and interpret these harmful relationships, prompting the question: how do students make sense of toxic friendships within their peer networks? This study employs an interpretative phenomenological approach to explore the lived experiences of university students who have been involved in toxic friendships. Data were collected through semi-structured, in-depth interviews with eight participants and analyzed thematically to identify core experiential themes. The findings reveal three dominant themes: emotional exhaustion from sustained relational harm, the paradox of performative belonging, and the emergence of self-agency through emotional detachment. These results highlight the emotional and cognitive processes through which students endure and eventually reclaim control over harmful social ties. The study expands our understanding of relational toxicity by uncovering meaning structures that are often hidden beneath social conformity. Importantly, the findings suggest practical implications for improving student well-being, as they may inform the development of targeted counseling programs, peer support initiatives, and preventive university policies aimed at reducing the impact of toxic friendships on mental health. These insights hold practical implications for student mental health services and suggest the need for future cross-cultural research into the evolving dynamics of toxic relationships in both physical and digital peer environments.



©2025 Authors. Published by PT Mukhlisina Revolution Center.. This work is licensed under a Creative Commons Attribution-NonCommercial 4.0 International License.

<https://creativecommons.org/licenses/by/4.0/>

INTRODUCTION

Interpersonal relationships play a vital role in shaping individual identity, emotional well-being, and social functioning, particularly within the developmental stage of young adulthood (Ma et al., 2025). In university settings, friendships often serve as a primary support system, offering a sense of belonging, validation, and psychological stability. However, not all social connections are inherently positive (Chung & Lo, 2025). A growing body of research has highlighted the emergence of toxic friendship dynamics, where relationships marked by manipulation, exclusion, and emotional harm persist within tightly knit peer groups, especially in environments where social visibility and peer approval are highly valued.

In recent years, toxic friendships have become increasingly visible in campus communities, often normalized under the guise of humor, competitiveness, or social loyalty (Alobaid, 2025). These relational experiences, while rarely physically aggressive, exert profound emotional and psychological effects (Lize et al., 2025). Students caught in such dynamics often report feelings of guilt, confusion, and self-blame, resulting in long-term consequences such as reduced academic engagement, social withdrawal, and identity diffusion. The complexity of these friendships lies not

only in their concealed emotional cost but also in the subtle pressures that compel individuals to remain within harmful relationships.

The subjective experience of navigating toxic friendships remains underexplored, especially in terms of how individuals perceive, internalize, and ultimately make sense of these relational experiences (Muthmainnah et al., 2025; Zhou et al., 2025). Given the subtle, often unspoken nature of emotional harm in social networks, there is a pressing need to move beyond surface-level descriptions and toward a deeper understanding of how these experiences are lived and interpreted by those involved (Awadalla et al., 2025). A phenomenological approach is particularly suited to address this gap, as it prioritizes the rich, first-person accounts of lived experiences and seeks to uncover the essence of phenomena as perceived by individuals themselves. In this context, exploring the meaning of toxic friendships through the lens of those who endure them becomes not only relevant but essential to advancing interpersonal and psychosocial knowledge.

Research into individuals' lived experiences within social relationships has become an essential domain within the broader field of interpersonal and psychosocial studies (Gong et al., 2025). Understanding how individuals perceive and navigate complex relational dynamics, such as toxic friendships, is crucial to uncovering the psychological and emotional realities that shape social behaviour (Keçeci & Ümmet, 2025). These subjective experiences often involve nuanced feelings conflict between belonging and self-preservation, ambiguity about loyalty, and internalized emotional distress that cannot be adequately captured through quantitative measures alone.

Despite increased academic attention, many existing studies on peer relationships in university settings rely heavily on survey-based methodologies or behavioral assessments, which, while valuable, tend to reduce complex emotional experiences into measurable variables (Lin et al., 2025; van Broekhoven et al., 2025). Such approaches frequently overlook the interpretive depth and unique context of individual experiences (Onukansi et al., 2025). As a result, the inner realities of those affected by toxic friendships how they internalize harm, negotiate their social identity, and interpret their role in the relationship remain underrepresented in the literature.

These methodological constraints point to a critical limitation in the existing body of research: the inability to access the essence of lived experiences through traditional empirical tools (Chen et al., 2025). Consequently, there is a growing recognition of the need for qualitative, experience-oriented methodologies particularly phenomenology that allow for an in-depth exploration of meaning as constructed by (Suiçmez et al., 2025). By focusing on participants' narratives and interpretations, phenomenology enables researchers to reveal the lived texture of toxic friendships, beyond surface-level descriptors, thus offering a more authentic understanding of the phenomenon.

Efforts to understand toxic friendships in university settings have largely leaned on behavioral assessments and psychological inventories that categorize social interactions based on predefined metrics (Matthew Damilola, 2025). While these practical tools provide useful insights into the prevalence and impact of harmful relationships, they fall short in capturing the rich, subjective meaning embedded in such experiences (Mariñas et al., 2025). The emotional nuances, internal conflicts, and personal interpretations that characterize toxic friendships often remain obscured when analyzed through rigid, outcome-oriented frameworks.

Quantitative studies may indicate correlations between peer toxicity and adverse mental health outcomes, but they rarely illuminate how individuals live through, rationalize, or emotionally process these relationships (Z. Wang et al., 2025). As a result, current understandings tend to be fragmentary focusing on observable patterns rather than the internalized meanings and lived realities that shape these patterns over time (Pioquinto & Fudolig, 2025). This limitation highlights the core research gap: while prior studies confirm the detrimental effects of toxic friendships, they often fail to explain how students themselves interpret, endure, and eventually negotiate meaning from such experiences. This study therefore contributes by providing an in-depth, phenomenological account of the lived realities of toxic friendships, offering insights that go beyond prevalence data and psychological outcomes to reveal the interpretive processes underlying student well-being and identity formation.

A phenomenological approach offers an alternative path one that prioritizes depth over generalization, and meaning over measurement (Mousazadeh et al., 2025). By centering the lived experiences of individuals and interpreting how they construct meaning around emotionally charged relationships, phenomenology can access the essence of toxic friendships in a way that conventional tools cannot (Agormedah, 2025; Melnyk et al., 2025). This study aims to respond to this gap by using interpretative phenomenological analysis (IPA) to examine how university students experience, interpret, and emotionally navigate toxic friendships within their social environments.

Previous research has examined the dynamics of peer relationships using frameworks such as social support theory, attachment theory, and peer conformity models (Makransky et al., 2025). These studies provide valuable insights into how individuals form and maintain friendships during young adulthood (S. Wang et al., 2025). However, few have explored the internal emotional journeys of individuals entangled in harmful relationships within their own social circles (Arfat et al., 2025). Some qualitative research has touched on this area, but often without a deep interpretive lens focused on subjective meaning (Dobrowolska et al., 2025). As a result, the inner realities of those experiencing toxic friendships remain under-theorized and underrepresented.

This study adopts an interpretative phenomenological approach to explore how university students experience and make sense of toxic friendships in campus-based social networks (J. Yang et al., 2025). The method allows for an in-depth analysis of participants' lived experiences and the meaning they assign to those experiences (Song et al., 2025). This approach was chosen to address the limitations of earlier studies that rely on surface-level indicators and fail to capture deeper emotional narratives (Schlechter et al., 2025). Through this lens, the research seeks to answer how students navigate, endure, and interpret the psychological complexities of toxic social ties. The goal is not to generalize, but to reveal meaning structures unique to each participant's experience.

The article is structured as follows: the introduction presents the background and rationale for the study, outlining the significance of the phenomenon (Lalot & Houston, 2025). The next section describes the phenomenological methodology, including data collection through in-depth interviews and thematic analysis guided by interpretative principles (Gerçek & Özveren, 2025). The results section presents the emergent themes supported by participant narratives. This is followed by a discussion that connects the findings to existing literature and explores theoretical and practical implications. The article concludes by summarizing key insights and suggesting directions for future research.

RESEARCH METHODS

Research Design

This study employed an interpretative phenomenological approach to explore the lived experiences of university students engaged in toxic friendships within campus-based social networks. Phenomenology, as a qualitative design, centers on understanding the essence of human experiences from the first-person perspective (Fife, 2020). The interpretative variant, rooted in the philosophical tradition of Heidegger, emphasizes not only the description of experiences but also the interpretation of their meaning within a broader social and personal context. This design was selected to uncover the depth of emotional, psychological, and relational dimensions embedded in the phenomenon under investigation. Through this lens, participants' narratives were analyzed to interpret how they made sense of their experiences within toxic social environments.

Participants

Participants were university students who had experienced or were currently engaged in toxic friendships within their social circles on campus. A purposive sampling strategy was applied to ensure the inclusion of individuals with direct and meaningful engagement with the phenomenon. Inclusion criteria comprised being an enrolled undergraduate student, aged between 19 and 24 years, and self-identifying as having experienced distress, manipulation, or social pressure within their peer group. Individuals without significant experiences of toxic social dynamics were excluded to maintain

relevance to the research objective. A total of eight participants were involved, consisting of five females and three males, with an average age of 21.2 years. All participants were drawn from various faculties within the same university to ensure contextual homogeneity while maintaining individual experiential diversity. The sample size was determined in line with phenomenological research conventions, which emphasize depth over breadth, and was deemed sufficient when thematic saturation was reached, ensuring no new significant insights emerged from additional participants.

Data Collection

Data were collected through semi-structured, in-depth interviews conducted face-to-face in private, quiet rooms on campus to ensure comfort and confidentiality. A flexible interview guide was used to prompt reflection while allowing participants the freedom to express their narratives in detail. Each interview lasted approximately 45 to 70 minutes and was audio-recorded with prior consent. Open-ended questions were employed to explore participants' perceptions, emotional responses, and reflections on their social relationships. Interview sessions were conducted in a manner that encouraged trust and openness, ensuring a supportive environment for sharing sensitive experiences. Although no formal pilot interviews were conducted, the study acknowledges that a pilot phase could have further refined the interview guide to enhance clarity and ensure the depth of participants' experiences was fully captured. The guide was nevertheless refined iteratively as themes began to emerge.

Data Analysis

The data were analyzed using interpretative phenomenological analysis (IPA), which involves a systematic process of identifying patterns of meaning and constructing thematic representations of the participants' lived experiences. Transcribed interviews were read multiple times to achieve immersion in the data. Significant statements and meaning units were extracted and clustered into themes through inductive coding. Themes were then organized to reflect both shared and unique aspects of participants' experiences. The final structure of themes aimed to preserve the richness of individual narratives while synthesizing collective meanings. NVivo software was utilized to manage the coding process and facilitate the organization of textual data, without altering the interpretive depth of the analysis.

Ethical Considerations

Ethical approval for the study was obtained from the institutional research ethics committee prior to data collection. Written informed consent was provided by all participants after receiving a clear explanation of the study's purpose, procedures, risks, and their rights, including the right to withdraw at any time without consequence. Anonymity was ensured through the use of pseudonyms, and all identifiable information was removed from transcripts. Audio recordings and transcripts were securely stored and accessible only to authorized personnel involved in the study. The research was conducted in accordance with the ethical principles outlined in the Declaration of Helsinki and applicable national ethical guidelines for research involving human participants.

RESULTS

The Invisible Weight — Emotional Exhaustion in Toxic Friendships

Participants consistently described a sense of persistent emotional depletion resulting from prolonged exposure to toxic friendships. The relationships were often characterized by manipulation, passive aggression, exclusion, and the pressure to conform within peer networks. This psychological burden was frequently internalized, leading to cycles of self-doubt and anxiety.

“I knew she wasn't treating me right, but I kept thinking maybe I was the problem. I didn't want to lose my place in the group, so I stayed quiet.”

“Being around them felt like walking on eggshells. Every joke was at my expense, but if I reacted, they would say I was too sensitive.”

“Sometimes I would go back to my dorm and cry for hours, but the next day I still showed up, because losing them felt scarier than staying.”

This emotional exhaustion was not momentary but cumulative, manifesting in academic disengagement, withdrawal from social activities, and, in extreme cases, mental health crises.

Performing Belonging — The Paradox of Social Visibility

Another prevalent theme was the paradoxical experience of “being visible yet unseen.” Participants reported maintaining their toxic friendships out of fear of social invisibility. Belonging to a peer group—even a harmful one—was perceived as preferable to social isolation, particularly within tightly knit campus networks where image and inclusion are socially rewarded.

“If you’re not part of a group, you’re nothing here. I laughed at their jokes, even when they were about me, just to stay included.”

“You can’t afford to be alone in college. So I smiled, posted happy photos, and kept pretending everything was fine.”

“I felt like a background character in my own life. They noticed me only when they needed someone to pick on, but I still clung to the idea that at least I belonged somewhere.”

This performative belonging reveals how students prioritize social perception over personal well-being, suggesting that the fear of exclusion is a driving force in the perpetuation of toxic relationships.

Reclaiming Self — Moments of Agency and Emotional Detachment

Despite the emotional strain, some participants expressed moments of critical reflection and gradual detachment from toxic relational cycles. These moments were often sparked by emotional burnout or external validation from non-toxic individuals. Recognizing their own value became a pivotal point in regaining autonomy.

“It hit me when someone from another class said, ‘You’re actually really kind.’ I realized I didn’t have to accept being treated badly.”

“I stopped replying to their messages and found peace in silence. It was the first time I felt like myself again.”

“Walking away was terrifying, but once I did, I realized how much lighter life felt. I finally had space to breathe.”

These moments of clarity enabled participants to re-evaluate the friendships they once tolerated, reclaim personal boundaries, and begin forming healthier social connections. This theme illustrates the dynamic and evolving nature of agency in the face of psychological harm.

The participants’ experiences reveal a complex interplay between emotional dependency, social identity, and the cost of belonging. The phenomenon of toxic friendship in campus social networks is not merely a matter of interpersonal conflict, but a profound relational experience shaped by fear, silence, performance, and eventual self-reclamation. Each theme offers insight into the lived realities of university students and the meaning they assign to relationships that simultaneously comfort and harm.

DISCUSSION

The findings of this study reveal that university students involved in toxic friendships often experience a deep internal conflict between the desire for social belonging and the emotional toll of staying in harmful relationships (Rouger & Barreiro, 2025). These lived experiences, marked by emotional exhaustion, performative inclusion, and eventual self-reclamation, directly address the central research question concerning how individuals make sense of toxic relational dynamics in peer networks.

This study contributes to the existing understanding of toxic friendships by uncovering the inner processes through which individuals interpret and endure relational harm (L. Yang et al., 2025). Rather than focusing on external behaviors or relational outcomes, the study highlights the internal narratives students construct to justify, rationalize, or eventually reject these harmful ties (Hakim et al., 2025). It demonstrates that toxic friendships are not simply dysfunctional social connections, but emotionally layered experiences that are deeply shaped by the need for inclusion, fear of isolation, and the gradual emergence of personal agency (Valencia-Arias et al., 2025). This insight provides a richer and more authentic understanding of the phenomenon, one that cannot be captured through conventional surveys or surface-level observations.

The findings align with and extend previous literature on peer relationships and social belonging. For instance, (Purabdollah et al., 2025) emphasizes the dialectical tensions present in close friendships, which can oscillate between intimacy and control. Similarly, (Heyder & Pegels, 2025) document the psychological effects of peer victimization, though their work focuses more on measurable outcomes than subjective meaning. This study complements such research by adding a phenomenological perspective that reveals how individuals narrate and assign meaning to their experiences of toxicity (Sawaguchi, 2025). The theme of “performing belonging,” for example, resonates with social identity theory, which suggests that individuals may conform to group norms even detrimental ones to maintain membership and avoid marginalization. However, this study goes further by illustrating the emotional cost of that conformity and the reflective processes that precede emotional detachment.

The implications of this study extend beyond the individual experiences of university students to broader considerations of social inclusion, emotional resilience, and psychological safety within academic environments (Kong & Zhu, 2025). The findings suggest that toxic friendships, often normalized or trivialized, carry significant emotional weight and influence students’ self-perception, mental health, and capacity for interpersonal trust. Culturally, the desire to belong within tightly knit peer groups may override critical self-reflection, especially in collectivist or high-performance educational settings (Carcamo & Pino, 2025). Professionally, these insights are valuable for student affairs practitioners, mental health counselors, and educators aiming to foster healthier social climates on campus. More specifically, the results highlight the need for universities to develop proactive interventions, such as workshops on emotional literacy and boundary-setting, peer-support groups that provide safe alternatives to harmful networks, and counseling services trained to recognize subtle signs of toxic relational dynamics. Universities may also consider embedding awareness programs into orientation sessions and residence life initiatives to help students critically evaluate friendship patterns early in their academic journey. By implementing these targeted supports, campuses can create structures that empower students to exercise agency, seek help without stigma, and foster healthier peer cultures.

This study, while offering deep insight into lived experiences, is limited by its contextual and methodological scope. The participants were drawn from a single university and reflect a relatively homogeneous demographic group, which may not represent the full range of cultural or institutional contexts in which toxic friendships occur. Furthermore, the interpretative phenomenological method prioritizes depth over breadth, which inherently limits the generalizability of findings to broader populations. These limitations do not undermine the value of the research but rather highlight the need for cautious interpretation and contextual sensitivity when applying its insights to other settings.

Future research can expand on these findings by exploring how toxic friendship dynamics evolve over time or differ across cultural, gendered, and digital contexts. Longitudinal studies may reveal how individuals process and recover from such relationships, while cross-cultural comparisons can uncover unique social pressures or protective factors. Additionally, integrating phenomenological insights with systemic approaches—such as ecological models of student development—can offer a more comprehensive framework for understanding and addressing relational harm in educational settings. For practice, this means universities should not only provide individualized counseling but also invest in systemic interventions—policy guidelines, peer mentoring structures, and community-building programs—that can reduce the prevalence and impact of toxic friendships in student life.

This research lays a foundation for further inquiry into the emotional ecosystems that shape young adult relationships and the narratives individuals construct to make sense of belonging and betrayal.

CONCLUSION

This study explored how university students experience and make sense of toxic friendships within campus-based social networks. The findings revealed three essential themes: emotional exhaustion, performative belonging, and moments of personal agency that emerged through reflective detachment. These insights show that toxic friendships are not merely dysfunctional social ties but deeply felt experiences that shape identity, belonging, and psychological resilience. By using an interpretative phenomenological approach, the study addresses limitations in previous research that overlooked the subjective meaning of relational harm. The results offer valuable implications for educational institutions, mental health practitioners, and peer support programs aiming to build healthier social environments. Future research could expand this inquiry across diverse cultural settings or explore how digital platforms reshape the experience and interpretation of toxic friendships. Additionally, longitudinal studies would be valuable to examine how students' experiences of toxic friendships evolve over the course of their academic journey, from initial involvement to eventual detachment or recovery. Comparative cross-cultural research could further illuminate how cultural norms, values, and expectations influence the tolerance, recognition, and resolution of toxic relationships. Such studies would not only deepen theoretical understanding but also provide context-specific insights to guide interventions in diverse university settings.

CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

REFERENCES

- Agormedah, E. K. (2025). Association between learning engagement and learning satisfaction among first-year business students in higher education: The moderating effect of gender. *Discover Education*, 4(1). Scopus. <https://doi.org/10.1007/s44217-025-00499-2>
- Alobaid, A. (2025). A didactical framework for raising awareness of digital multiliteracies among university students: Objectives, expectations and challenges. *Discover Education*, 4(1). Scopus. <https://doi.org/10.1007/s44217-025-00599-z>
- Arfat, Y., Shahid, M. K., Al-tayyar, R. S., Mahmood, K., & Alghamdi, A. (2025). Building inclusive learning environment through hybrid learning system: Role of technology and corresponding engagement. *Sustainable Futures*, 10. Scopus. <https://doi.org/10.1016/j.sftr.2025.100887>
- Awadalla, S., Davies, E. B., & Glazebrook, C. (2025). A pre–post study evaluating an online CBT-based intervention to improve academic performance in students with low mood. *Humanities and Social Sciences Communications*, 12(1). Scopus. <https://doi.org/10.1057/s41599-025-05037-x>
- Carcamo, B., & Pino, B. (2025). Developing EFL students' multimodal literacy with the use of infographics. *Asian-Pacific Journal of Second and Foreign Language Education*, 10(1). Scopus. <https://doi.org/10.1186/s40862-025-00322-3>
- Chen, Z., Razman, M. R., Zakaria, S. Z. S., & Lee, K. E. (2025). Assessing knowledge, attitudes and behaviours for sustainable development: A case study of Tibet University. *Discover Sustainability*, 6(1). Scopus. <https://doi.org/10.1007/s43621-025-01437-w>
- Chung, B., & Lo, N. (2025). A comparative study of self-regulated English learning through mobile language-learning applications in post-pandemic Hong Kong and South Korea. *Smart Learning Environments*, 12(1). Scopus. <https://doi.org/10.1186/s40561-025-00399-w>

- Dobrowolska, B., Chiapinotto, S., Cabrera, E., Chloubová, I., Kane, R., Kennedy, S., Lovrić, R., Stanisavljević, S., Riklikienė, O., & Palese, A. (2025). Changes and continuities in undergraduate nursing education during and after COVID-19: A European comparative study from the perspective of health science. *BMC Medical Education*, 25(1). Scopus. <https://doi.org/10.1186/s12909-025-07407-0>
- Fife, W. (2020). *Counting as a Qualitative Method: Grappling with the Reliability Issue in Ethnographic Research* (p. 140). Springer International Publishing; Scopus. <https://doi.org/10.1007/978-3-030-34803-8>
- Gerçek, M., & Özveren, C. G. (2025). Creative self-efficacy, learning agility, and proactive career behaviors: The moderated mediation effect of positive AI attitudes among young adults. *Thinking Skills and Creativity*, 58. Scopus. <https://doi.org/10.1016/j.tsc.2025.101895>
- Gong, X., Wan, Y., Yu, W., Li, L., Tong, H., & Chang, X. (2025). A project-based continuous instructional model and its application based on LCA. *International Journal of Management Education*, 23(3). Scopus. <https://doi.org/10.1016/j.ijme.2025.101213>
- Hakim, S. R., Hariyanto, D., Suprpto, N., Fahmi, H. Z., Nisa, K., & Rizki, I. A. (2025). Design and implementation of VR lato-lato STEAM in engineering education science. *International Journal of Evaluation and Research in Education*, 14(4), 2749–2761. Scopus. <https://doi.org/10.11591/ijere.v14i4.32206>
- Heyder, A., & Pegels, H. (2025). Detrimental effects of instructors' fixed mindsets on students' anticipated motivation and emotions in secondary and higher education. *Social Psychology of Education*, 28(1). Scopus. <https://doi.org/10.1007/s11218-024-10001-9>
- Keçeci, B., & Ümmet, D. (2025). A study of psychological violence in intimate partner relationships among university students: A mixed-methods research. *Humanities and Social Sciences Communications*, 12(1). Scopus. <https://doi.org/10.1057/s41599-025-04375-0>
- Kong, S. C., & Zhu, J. (2025). Developing and validating an artificial intelligence ethical awareness scale for secondary and university students: Cultivating ethical awareness through problem-solving with artificial intelligence tools. *Computers and Education: Artificial Intelligence*, 9. Scopus. <https://doi.org/10.1016/j.caeai.2025.100447>
- Lalot, F., & Houston, D. M. (2025). Comparison in the classroom: Motivation for academic social comparison predicts academic performance. *Social Psychology of Education*, 28(1). Scopus. <https://doi.org/10.1007/s11218-024-10008-2>
- Lin, P., Saenubol, K., & Srisawat, P. (2025). An Empirical Study on Quality of Life Among Chinese University Students: Application of the KIDSCREEN-52 Instrument. *Journal of Ecohumanism*, 4(1), 1137–1158. Scopus. <https://doi.org/10.62754/joe.v4i1.5918>
- Lize, V., Fanny, B., Viktor, D. M., Delphine, F., Laure, J., Ann, M., Grégory, M., Elke, M., & Evelien, O. (2025). A Game Plan to Support First-Year Students in Higher Education: The Case Study of a Gamified Orientation Day. *European Journal of Education*, 60(3). Scopus. <https://doi.org/10.1111/ejed.70165>
- Ma, J., Li, H., Liang, C., Li, S., Liu, Z., & Qu, C. (2025). A brief virtual reality-based mindfulness intervention can improve olfactory perception while reducing depression and anxiety symptoms in university students. *Humanities and Social Sciences Communications*, 12(1). Scopus. <https://doi.org/10.1057/s41599-025-04584-7>
- Makransky, G., Shiwalia, B. M., Herlau, T., & Blurton, S. (2025). Beyond the “Wow” Factor: Using Generative AI for Increasing Generative Sense-Making. *Educational Psychology Review*, 37(3). Scopus. <https://doi.org/10.1007/s10648-025-10039-x>
- Mariñas, K. A., Saflor, C. S., Alvarado, P., Uminga, J. M., & Verde, N. A. (2025). Assessing the importance of variables from a revised technology acceptance model for the use of ChatGPT

- by university students. *Computers and Education: Artificial Intelligence*, 9. Scopus. <https://doi.org/10.1016/j.caeai.2025.100435>
- Matthew Damilola, O. (2025). Assessing the Impact of Kidnapping and Banditry on Students' Academic Performance in Nigeria: Implications for Education and Security Policies. *Journal of Ecohumanism*, 4(1), 3218–3230. Scopus. <https://doi.org/10.62754/joe.v4i1.6136>
- Melnyk, D., Salem, M., Ertz, M., & Wagner, R. (2025). Being the “Better” student: Intentions to reduce food waste. *Discover Sustainability*, 6(1). Scopus. <https://doi.org/10.1007/s43621-025-01021-2>
- Mousazadeh, Y., Sarbakhsh, P., Arbabisarjou, A., Tolouei, M., Mousavi, H., & Molaei, S. (2025). Association between health-promoting lifestyle and electronic health literacy among Iranian university students. *BMC Medical Education*, 25(1). Scopus. <https://doi.org/10.1186/s12909-025-06823-6>
- Muthmainnah, M., Cardoso, L., Marzuki, A. G., & Al Yakin, A. (2025). A new innovative metaverse ecosystem: VR-based human interaction enhances EFL learners' transferable skills. *Discover Sustainability*, 6(1). Scopus. <https://doi.org/10.1007/s43621-025-00913-7>
- Onukansi, F. O., Umoh, M. E., Eneh, S. C., Anokwuru, C. C., Ezejindu, C. N., Dozie, U. W., Diala, M. I., Fosso, L. C. F., & Madukaku, C. U. (2025). Antibiotic use among university students: Insights from a Nigerian institution. *BMC Medical Education*, 25(1). Scopus. <https://doi.org/10.1186/s12909-025-07145-3>
- Pioquinto, P. P., & Fudolig, M. A. (2025). Association between acculturation, muscle dysmorphia symptomatology, and anabolic-androgenic steroid use ideation in Filipino American male university students: A pilot study. *Performance Enhancement and Health*, 13(3). Scopus. <https://doi.org/10.1016/j.peh.2025.100346>
- Purabdollah, M., Zamanzadeh, V., Ghahramanian, A., Valizadeh, L., Ghasempour, M., & Mousavi, S. (2025). Determining and comparing the achieved competencies of graduating nursing students of public and private universities in Iran. *BMC Medical Education*, 25(1). Scopus. <https://doi.org/10.1186/s12909-024-06622-5>
- Rouger, M., & Barreiro, A. (2025). Critical Consciousness Development in Young Participants of University Student Unions. *Integrative Psychological and Behavioral Science*, 59(3). Scopus. <https://doi.org/10.1007/s12124-025-09919-2>
- Sawaguchi, R. (2025). Developing a CEFR-based diagnostic test to assess Japanese university students' productive knowledge of lexical bundles. *Language Testing in Asia*, 15(1). Scopus. <https://doi.org/10.1186/s40468-025-00361-0>
- Schlechter, P., Meyer, T., Hagen, M., Baranova, K., & Morina, N. (2025). Comparative thinking among university students: An ecological momentary assessment of upward comparisons, stress and learning behavior during exam preparation. *Social Psychology of Education*, 28(1). Scopus. <https://doi.org/10.1007/s11218-025-10026-8>
- Song, S., Adnan, H. M., & Ibrahim, M. S. (2025). Communicating Health Through Images: How Social Media Visuals Shape Body Comparison in Chinese Young Women. *Studies in Media and Communication*, 13(4), 43–55. Scopus. <https://doi.org/10.11114/smc.v13i4.7690>
- Suiçmez, İ., Altınay, F., Dağlı, G., Zeng, H., Shadiev, R., İşlek, D., Danju, İ., & Altınay, Z. (2025). Artificial intelligence application for museum to experiential transformation of cultural heritage and learning. *Smart Learning Environments*, 12(1). Scopus. <https://doi.org/10.1186/s40561-025-00404-2>
- Valencia-Arias, A., Londoño-Celis, W., Palacios Moya, L., Iparraguirre Sanchez, G. K., Cardona-Acevedo, S., & Rodríguez-Correa, P. A. (2025). Determinants of sustainable entrepreneurial intention in Colombian and Peruvian University students: A theory of planned behaviour approach. *Discover Sustainability*, 6(1). Scopus. <https://doi.org/10.1007/s43621-025-01491-4>

- van Broekhoven, K., van Uum, M. S. J., Chiu, M. M., & Kroesbergen, E. H. (2025). Antecedents of creativity: Statistical discourse analysis of university student teams' interactions. *Learning and Instruction, 100*. Scopus. <https://doi.org/10.1016/j.learninstruc.2025.102190>
- Wang, S., Mbanyele, W., Feng, T., Khan, S., & Fan, S. (2025). Bridging the knowledge-action divide: Environmental awareness and low-carbon behaviors of Chinese university students. *Humanities and Social Sciences Communications, 12*(1). Scopus. <https://doi.org/10.1057/s41599-025-04953-2>
- Wang, Z., Chai, C.-S., Li, J., & Lee, V. W. Y. (2025). Assessment of AI ethical reflection: The development and validation of the AI ethical reflection scale (AIERS) for university students. *International Journal of Educational Technology in Higher Education, 22*(1). Scopus. <https://doi.org/10.1186/s41239-025-00519-z>
- Yang, J., Brandon, R., Zhang, A., Yang, Y., & Zhang, H. (2025). Childhood emotional neglect and psychological distress among Chinese college students: The mediating roles of basic psychological needs and coping styles. *Children and Youth Services Review, 177*. Scopus. <https://doi.org/10.1016/j.childyouth.2025.108479>
- Yang, L., Zeng, R., Wang, X., Chen, J., Gu, J., Fan, J., Qiu, J., & Cao, G. (2025). Cross-domain analogical reasoning ability links functional connectome to creativity. *Thinking Skills and Creativity, 57*. Scopus. <https://doi.org/10.1016/j.tsc.2025.101808>
- Zhou, K., Xia, L., Sui, X., & Tao, J. (2025). A novel evaluation method for students' self-directed learning ability: A case study of financial management students. *International Journal of Management Education, 23*(3). Scopus. <https://doi.org/10.1016/j.ijme.2025.101242>