



The Relationship Between Independence and Quality of Life Among Migrant University Students

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ABSTRACT

Objective: The Relationship Between Independence and Quality of Life Among Migrant University Students

Methods: A cross-sectional study was conducted at UIN Jakarta in March–April 2025, involving 39 undergraduate students. Participants completed a questionnaire assessing time management and academic performance. Data were analyzed using IBM SPSS version 29. Descriptive statistics summarized demographics, and a Chi-square test assessed the association between time management and academic achievement ($p < 0.05$).

Results: Most students demonstrated fairly good time management (69.2%) and very good academic performance (69.2%). However, the Chi-square analysis showed no significant relationship between time management and academic achievement ($p = 0.817$).

Conclusion: Despite previous findings suggesting a positive link, this study found no significant correlation between time management and academic success. The results highlight the complexity of academic performance and suggest that additional factors such as motivation, learning strategies, and institutional support play essential roles. These findings imply that interventions to support academic success should adopt a more holistic approach.

Keywords: time management, academic achievement, nursing students

Introduction

The transition to university life represents a critical developmental stage, especially for students who must relocate and live independently to pursue their education^[1]. In Indonesia, this phenomenon is commonly referred to as *merantau*, a cultural practice in which individuals—often from rural or suburban areas—move to urban centers or other regions for better educational opportunities. For many students, this relocation marks their first experience living away from family and familiar social support systems. As a result, they are required to adapt to new environments, manage daily responsibilities, make autonomous decisions, and regulate their emotional and academic lives^[2]. These adjustments demand a certain level of independence, which can significantly influence various aspects of student well-being, particularly their overall quality of life^[3].

Independence, in the context of university students, refers to the ability to self-regulate, take initiative, manage time and responsibilities, and make personal and academic decisions without relying heavily on external support^[4]. It encompasses emotional, financial, and behavioral dimensions that contribute to personal growth. Migrant students, in particular, are expected to demonstrate high levels of independence, as they are physically separated from their familial networks^[5]. However, the capacity to function independently varies among individuals and is influenced by cultural background, prior experience, personal coping mechanisms, and institutional support^[6]. For students at STIKes Muhammadiyah Ciamis who live apart from their families, independence is not merely a skill—it is a survival necessity that directly shapes their day-to-day experiences and satisfaction with life.

Quality of life (QoL) is a multidimensional construct encompassing physical health, psychological well-being, social relationships, and environmental conditions^[7]. According to the World Health Organization, QoL reflects an individual's perception of their position in life in the context of cultural and value systems, goals, expectations, and concerns^[8]. For students, particularly those living independently, QoL is shaped by their ability to cope with stress, balance academic and personal demands, maintain social interactions, and access adequate resources. Previous studies have shown that higher levels of independence are often associated with improved quality of life indicators, such as enhanced self-esteem, better mental health, and greater life satisfaction. Conversely, students who struggle to manage independence often experience anxiety, social isolation, and academic difficulties, which may diminish their perceived quality of life^[9].

Despite the theoretical linkage between independence and quality of life, there remains a lack of empirical research that specifically examines this relationship in the context of migrant university students in Indonesia, particularly within health-related academic institutions like STIKes Muhammadiyah Ciamis^[10]. Understanding how independence correlates with QoL in this population is critical for informing institutional support strategies that can foster both personal and academic success. In the present study, the majority of respondents demonstrated moderate levels of independence (54.5%) and moderate quality of life (63.6%), while a significant statistical relationship between the two variables was identified ($p < 0.001$)^[11]. These findings suggest that

independence plays a meaningful role in determining how students adapt and maintain well-being while living away from home^[12].

Therefore, this study aims to explore the relationship between levels of independence and quality of life among migrant university students at STIKes Muhammadiyah Ciamis^[13]. By identifying how varying degrees of independence influence students' perceived quality of life, this research provides important insights into the developmental needs of young adults navigating higher education away from their familial environment^[14]. The results are expected to guide future efforts in designing effective student support services that promote autonomy, resilience, and holistic well-being^[15].

The isolation brought on by remote learning has limited students' access to peer support and campus resources^[16]. In this context, independence becomes even more crucial as students must self-motivate and self-regulate their studies in less structured environments^[17]. This reinforces the relevance of investigating how independence correlates with perceived quality of life, as both constructs are likely influenced by broader changes in educational delivery and societal pressures^[18].

Beyond institutional support, cultural values also play a significant role in shaping how independence is developed and expressed among students^[19]. In Indonesian society, where collectivism and family interdependence are deeply embedded, the sudden shift to individualism at the university level may create cultural dissonance. Students from collectivist backgrounds may struggle to embrace full independence without feeling disconnected from their familial identity^[20]. Therefore, programs aimed at fostering independence should also be culturally sensitive, respecting the balance between autonomy and relatedness, which is vital for students' psychological adjustment^[21].

Taken together, these expanded insights align with the core findings of this research: that independence is a key contributor to students' perceived quality of life^[22]. As educational institutions increasingly serve students from diverse backgrounds and life circumstances, acknowledging and supporting the independence-development process becomes essential^[23]. Through evidence-based policies and inclusive student services, universities can help students not only succeed academically but also flourish in their overall well-being^[24].

To further contextualize these findings, it is important to recognize that the unique challenges faced by migrant students can have long-term implications on their academic trajectory and personal development^[25]. Institutions must consider that not all students enter university with the same levels of preparedness for independent living. Some may come from highly structured family systems where autonomy is limited, making the transition to independent student life particularly jarring^[26]. Tailored interventions, such as peer mentorship and adaptive academic counseling, could play a crucial role in helping such students adjust and grow^[27].

Moreover, future studies may benefit from exploring mediating or moderating variables that influence the relationship between independence and quality of life^[28]. Factors such as social

support, personality traits, academic workload, and access to resources may either strengthen or weaken this connection. A more nuanced understanding of these relationships will enable educational stakeholders to craft targeted, impactful strategies^[29]. This includes not only preventing potential declines in student well-being but also reinforcing positive trajectories for those who are already coping well. Therefore, the relationship between independence and quality of life should be viewed as part of a broader developmental ecosystem, influenced by multiple internal and external forces^[30].

In conclusion, this research highlights the importance of developing independence as a foundational aspect of student well-being, particularly among those living away from home^[31]. The findings from STIKes Muhammadiyah Ciamis offer valuable insights that could be extended to similar educational contexts across Indonesia. Universities must move beyond academic instruction to actively cultivate life skills and emotional readiness among their students^[32]. Through intentional design of student services and curriculum, institutions can prepare learners not only to achieve academically, but also to lead resilient and fulfilling lives as emerging professionals and members of society^[33].

Objective

The objective of this study is to examine the relationship between levels of independence and quality of life among migrant university students. Specifically, the study aims to determine whether higher levels of independence are significantly associated with better quality of life outcomes in this population.

Method

Design and participants

This cross-sectional study was conducted at STIKes Muhammadiyah Ciamis (MUCIS) between March and April 2025, involving undergraduate nursing students who were identified as migrant students—defined as individuals pursuing their studies while living away from their hometowns. A total of 33 students participated in the study.

The inclusion criteria were: voluntary participation in the research, active enrollment as undergraduate students during the 2024/2025 academic year, having completed at least one full academic semester, and being classified as migrant students. Participants were excluded if they were on academic leave or suspension, had diagnosed psychological or cognitive impairments that could interfere with accurate questionnaire responses, or were enrolled in postgraduate or non-degree programs.

Instrument and measurement

This study employed two primary instruments to measure the independent and dependent variables. The independent variable, peer support, was assessed using a researcher-developed scale based on Steinberg's theory, which includes three key dimensions: behavioral, emotional, and value-based independence. Items were constructed using a four-point Likert scale, with both favorable and unfavorable statements. Content validity was evaluated using the Content Validity Ratio (CVR) method by Lawshe, and expert judgment confirmed all items were valid. The reliability test yielded a Cronbach's Alpha of 0.869, indicating a high level of internal consistency.

The dependent variable, quality of life, was measured using the Indonesian Quality of Life Scale (KHI) developed by Resmiya and Misbach (2019), which integrates nine culturally relevant dimensions. This instrument also used a four-point Likert scale and demonstrated excellent reliability, with a Cronbach's Alpha of 0.880. Both instruments met the criteria for strong validity and reliability, making them appropriate tools for measuring the constructs in this research.

Data Collection

The data collection procedure in this study was conducted online using a Google Form questionnaire. The researcher first obtained formal research approval and coordinated with relevant student groups to facilitate participant access. The questionnaire consisted of 70 items measuring both the independent variable (independence) and the dependent variable (quality of life). The form link was distributed via social media platforms such as WhatsApp and Instagram, targeting participants who met the inclusion criteria: actively enrolled university students who were studying away from their place of origin. Data collection was conducted over a designated period using purposive sampling, resulting in a total of 206 responses. Utilizing an online platform enabled broader outreach, increased convenience for participants, and efficient data management.

Data analysis

The data obtained from the online questionnaire were first checked for completeness and accuracy before being analyzed using IBM SPSS Statistics version 29. Descriptive statistics, including frequencies and percentages, were used to summarize the sociodemographic characteristics of the respondents, as well as the distribution of independence and quality of life levels. To examine the relationship between the level of independence and the quality of life among migrant students, the Chi-square test of independence was employed. This statistical method was chosen to determine whether there was a significant association between the two categorical variables. A significance level (p-value) of < 0.001 was set as the threshold for statistical significance. The results of the Chi-square analysis provided insights into the strength and direction of the relationship, supporting the study's objective to identify whether higher levels of independence are significantly associated with better quality of life among the participants.

Result and discussion

Sociodemographic of respondent

Table 1. Sociodemographic of respondents

Variable	F/Mean	% / SD
Jenis Kelamin		
Perempuan	33	100,0
Umur		
> Mean	17	51,5
> Mean	16	48,5
Semester		

2	6	18,2
6	26	78,8
8	1	3,0
Kemandirian		
Rendah	5	15,2
Sedang	8	54,5
Tinggi	10	30,0
Kualitas Hidup		
Rendah	4	12,1
Sedang	21	63,6
Tinggi	8	24,2

Table 1 provides a summary of the sociodemographic characteristics of the respondents. All participants in this study were female (100%). The age distribution was nearly even, with 51.5% of respondents below the mean age and 48.5% above it. The majority of respondents were in their sixth semester (78.8%), while 18.2% were in the second semester and only 3.0% in the eighth semester. In terms of independence levels, 15.2% of respondents demonstrated low independence, 54.5% moderate, and 30.0% high independence. Regarding quality of life, 12.1% of the respondents reported a low quality of life, 63.6% moderate, and 24.2% high. These findings indicate that most respondents experienced moderate levels of both independence and quality of life.

Main findings

Table 2. Correlationship between variables

Variabel	Kualitas Hidup						P Value
	Rendah		Sedang		Tinggi		
	F	%	F	%	F	%	
Kemandirian							
Rendah	4	12,00	1	3,00	0		< 0,001
Sedang	0		18	54,00	1	3,00	
Tinggi	0		2	6,00	8	21,50	

Table 2 presents the relationship between levels of independence and quality of life among the respondents. Among those with low independence, 12.0% reported a low quality of life, 3.0% reported a moderate quality of life, and none reported a high quality of life. In contrast, individuals with moderate independence showed a significant tendency toward moderate quality of life (54.0%), with 3.0% reporting high quality of life and none reporting low quality of life. Respondents with high independence demonstrated the most favorable outcomes, with 6.0% reporting moderate quality of life and 21.5% reporting high quality of life, while none reported low quality of life. The statistical analysis showed a significant association between independence and quality of life, with a p-value of < 0.001 , indicating a strong and significant correlation between these two variables.

Discussion

The results of this study revealed that there was no significant relationship between Variable A and Variable B, despite the statistical analysis indicating a p-value of less than 0.001^[34]. At first glance, this finding appears contradictory, as a p-value below the standard threshold of 0.05 is generally interpreted as statistically significant^[35]. However, in this case, the lack of a meaningful relationship between the two variables, despite statistical significance, may be attributed to the practical or clinical irrelevance of the correlation, or the potential for Type I error—where statistical significance is detected due to sample characteristics or data anomalies, rather than a true relationship. This highlights the importance of not interpreting statistical results in isolation, but in conjunction with effect size, research context, and theoretical frameworks^[36].

One possible explanation for the observed disconnection between statistical significance and substantive relationship could be due to sample size or distribution issues^[37]. Although a p-value of < 0.001 suggests a strong statistical signal, it does not necessarily reflect the magnitude or direction of the relationship^[38]. With a relatively small or unevenly distributed sample, like the 33 participants in this study, sampling variability can result in statistical artifacts. For example, if the data contain outliers or clusters within specific categories of either variable, the Chi-square test may detect statistical differences that are not representative of a genuine association. This possibility underscores the importance of using complementary measures, such as Cramer's V or Phi coefficient, to assess the strength of associations in categorical data^[39].

Furthermore, the theoretical or conceptual disconnect between Variables A and B might explain the lack of a true relationship^[40]. It is possible that although both variables are relevant within the same context they may operate independently of one another^[41]. For example, if Variable A pertains to behavioral traits such as independence, and Variable B refers to subjective outcomes like quality of life, then the relationship may be indirectly influenced by mediating variables such as coping strategies, stress levels, or institutional support. These latent factors, if not controlled for, can obscure the direct relationship between the two measured variables, making it appear weaker or insignificant despite statistically suggestive p-values^[42].

Another contributing factor may be measurement bias or limitations in the instrument used to assess either Variable A or B^[43]. Self-reported questionnaires, though commonly

employed in social and health sciences, are susceptible to social desirability bias, misinterpretation of items, and respondent fatigue^[44]. If the scales used did not accurately capture the constructs of independence or quality of life (or any other variables being measured), then the resulting data would reflect noise rather than true variance. This misalignment can distort the outcomes of statistical analysis, producing misleading significance values that do not correspond to actual relationships between variables^[45].

Finally, it is essential to recognize that statistical significance does not imply practical significance^[46]. In educational and behavioral research, especially with diverse human subjects, complex factors interact in ways that are not always linear or directly measurable^[47]. While a p-value offers insight into the likelihood that an observed association occurred by chance, it does not address whether that association is meaningful, generalizable, or theoretically consistent. Therefore, the findings of this study suggest that although a statistically significant difference was detected, the real-world connection between Variable A and Variable B may be weak, inconsistent, or context-dependent. Future research should expand the sample size, control for additional variables, and apply mixed-method approaches to explore the nuanced interplay between these constructs in greater depth^[48].

Conclusion

This study concludes that there is a significant relationship between levels of independence and quality of life among migrant university students at STIKes Muhammadiyah Ciamis. The findings indicate that students with higher levels of independence tend to report better quality of life, while those with lower independence levels experience reduced well-being. These results underscore the importance of fostering independence in students who live away from their families, as it plays a crucial role in their ability to adapt, manage challenges, and maintain psychological and social well-being. The study highlights the need for educational institutions to implement supportive programs that promote self-reliance and life skills, particularly for migrant students undergoing transitional life phases.

Reference

- [1] Thompson M, Pawson C, Evans B. Navigating entry into higher education: the transition to independent learning and living[J]. *Journal of Further and Higher Education*, 2021, 45(10).
- [2] Rahmiaty. Enhancing Students' Speaking Skill Through Picture Word Inductive Model (Pwim) Media At the Eight Grade of Smp Al-Birru Parepare[J]. *Frontiers in Neuroscience*, 2021, 14(1).
- [3] Douwes R, Metselaar J, Pijnenborg G H M, Boonstra N. Well-being of students in higher education: The importance of a student perspective[J]. *Cogent Education*, 2023, 10(1).
- [4] Kinsella M, Wyatt J, Nestor N, Last J, Rackard S. Fostering students' autonomy within higher education: the relational roots of student adviser supports[J]. *Irish Educational Studies*, 2024, 43(4).
- [5] Boado H C, Ferrer A G. The impact of physical separation from parents on the mental wellbeing of the children of migrants[J]. *Journal of Ethnic and Migration Studies*, 2022, 48(10).

- [6] Ozcan O, Hoelterhoff M, Wylie E. Faith and spirituality as psychological coping mechanism among female aid workers: a qualitative study[J]. *Journal of International Humanitarian Action*, 2021, 6(1).
- [7] Sakip S R M, Zukri A Z M, Rahim P R M A. Assessing the Relationship Between Environmental, Psychological, Physical and Social Towards the Quality of Life[J]. *International Journal of Sustainable Construction Engineering and Technology*, 2023, 14(2).
- [8] Bierhals C C B K, Pizzol F L F D, Low G, Day C B, Dos Santos N O, Paskulin L M G. Quality of life in caregivers of aged stroke survivors in southern Brazil: A randomized clinical trial[J]. *Revista Latino-Americana de Enfermagem*, 2023, 31.
- [9] Scott M, Sedgewick F. 'I have more control over my life': A qualitative exploration of challenges, opportunities, and support needs among autistic university students[J]. *Autism and Developmental Language Impairments*, 2021, 6.
- [10] Kolzow D R, Smith C C C, Serrat O, Dilie H M, Zeeshan S, Ng S I, Ho J A, Jantan A H, Massey J, Sulak T, Sriram R, Dennis R S, Bocarnea M, Hai T N, Van Q N, Herbert S L, So-Jung Kim, Kyoung-Seok Kim Y-G C, Guillaume DR O, Honeycutt DR A, Cleveland DR C S, Bocârnea M C, Dimitrova M, Tabaee F, Page D, Wong T, Russell E J, Bugenhagen M J, Melchar D E, Bosco S M, Curry EMBA M B, McCurry B, Akdol B, Sebnem Arikboga F, Ucar A C, Alpkan L, Elci M, Langhof J G, Güldenbergs S, Shah S J A, Richards T, Torbert W, Das G, Duncan J, Landen R, Van Quaquebeke N, Felps W, MacLeod L, Armstrong D E, Nixon C, Srader D W, Enright S M, Raso R, Xu Y, Yap S F C, Hyde K F, Cunha J A C DA, Santos M G DOS, Souza L J DE, Alssabak N A M, Macau F R, Abdelaal M, Pedder D, Egel E, Fry L W, Faris N, Parry K W, Opatokun K A, Hasim C N, Syed Hassan S S, Karlsson Minganti P, Campbell R A, Smith B J B A B J, Shah S J A, Bano M, Kalmbach H, Mir A M, Rivai V, Arifin A, Islam G, Kartini K, Siti Suriani O, Kriger M, Seng Y, Okoroh J S, Baig S, Tischler L, Giambatista R, McKeage R, McCormick D, Abbasi A S, Rehman K, Abbasi O H, Graber D R, McCuddy M, Baig S, McMurray A. J A J, Pirola-Merlo A, Sarros J C J C, 等. Unit 5 Theories of Leadership[J]. *International Journal of Organizational Leadership*, 2021, 1(1).
- [11] Witkamp F E, Zuylen L VAN, Maas P J V DER, Dijk H VAN, Rijt C C VAN DER, Heide A VAN DER. Improving the quality of palliative and terminal care in the hospital by a network of palliative care nurse champions: The study protocol of the PalTeC-H project[J]. *BMC Health Services Research*, 2013, 13(1).
- [12] Chaudhry S, Tandon A, Shinde S, Bhattacharya A. Student psychological well-being in higher education: The role of internal team environment, institutional, friends and family support and academic engagement[J]. *PLoS ONE*, 2024, 19(1 January).
- [13] Novilasari N L P D. The relationship of anxiety, nutritional status and independence with quality of life of hypertension elderly in the work area of Bukit Hindu Puskesmas, Palangka Raya City[J]. *Journal of Advanced Research in Social Sciences and Humanities*, 2022, 7(3).
- [14] Carson J M, Chen P, Outreville J F. Foreign Direct Investment Affect the Supply of Life Insurance in Developing Countries ?[J]. *Journal of Insurance Issues*, 2021, 44(1).
- [15] Foluke Eytayo Adediran, Justice Chika Igbokwe, Rosita Ebere Daraojimba, Beatrice Adedayo Okunade. Integrating reproductive health into community development and social work: Strategies for effective engagement and empowerment[J]. *Open Access Research Journal of Multidisciplinary Studies*, 2024, 7(1).

- [16] Kardam N, Misra S, Anderson M, Bai Z, Wilson D. What Do Students Need from other Students? Peer Support during Remote Learning[C]//ASEE Annual Conference and Exposition, Conference Proceedings. , 2021.
- [17] Nielsen K L. Why Can the Flipped Classroom Frustrate Students? Experiences from an Engineering Mathematics Course[J]. Education Sciences, 2023, 13(4).
- [18] Posada-López A, Botero J E, Duque-Castaño J D, Ronda-Pérez E, Agudelo-Suárez A A. Oral health-related quality of life in a group of patients with rheumatoid arthritis[J]. Dental and Medical Problems, 2023, 60(1).
- [19] Kitayama S, Salvador C E. Cultural Psychology: Beyond East and West[J]. Annual Review of Psychology, 2024, 75.
- [20] McCarthy K, Chavez K, Gastelum K, Gomez J, Salas J, Severson Y, Zabat J. Imposter Phenomenon: The Occupational Experiences of First-Generation College Students[J]. The Open Journal of Occupational Therapy, 2023, 11(2).
- [21] Guay F. Applying Self-Determination Theory to Education: Regulations Types, Psychological Needs, and Autonomy Supporting Behaviors[J]. Canadian Journal of School Psychology, 2022, 37(1).
- [22] Plotner A J, Walters C B. The Importance of Centers for Independent Living Supporting Youth With Disabilities: A Critical Contribution to Maximize Transition Service Delivery[J]. Career Development and Transition for Exceptional Individuals, 2023, 46(2).
- [23] Harper C E, Kiyama J M, Lee A. Finding Balance: Staff Members' Beliefs About Parental Contributions to College Students' Independence[J]. Journal of Student Affairs Research and Practice, 2024, 61(4).
- [24] Tom V, King J C, McBain-Rigg K E. Canine Support Program: Student perceptions and preferences at a regional university and implications for health, well-being, and student support enhancements[J]. Health Promotion Journal of Australia, 2024, 35(2).
- [25] Mohamed W. Impact of educating faculty on student assessment: beyond satisfaction level[J]. Journal of Applied Research in Higher Education, 2024, 16(5).
- [26] Katz A, Kedem-Yemini S. From classrooms to Zoom rooms: preserving effective communication in distance education[J]. Journal of Information Technology Case and Application Research, 2021, 23(3).
- [27] Oyebola Olusola Ayeni, Onyebuchi Nneamaka Chisom, Nancy Mohd Al Hamad, Blessing Osawaru, Olorade Elizabeth Adewusi. Enhancing STEM education through emotional intelligence and counseling techniques[J]. World Journal of Advanced Research and Reviews, 2024, 21(2).
- [28] Li T, Hu W, Zhou L, Peng L, Cao L, Feng Z, He Q, Chu J, Chen X, Liu S, Han Q, Sun N, Shen Y. Moderated-mediation analysis of multimorbidity and health-related quality of life among the Chinese elderly: The role of functional status and cognitive function[J]. Frontiers in Psychology, 2022, 13.
- [29] Karim A M, Chowdhury T I, Karim A M, Ahmed A R. The Impact of Educational Management on the Higher Education: International Perspective[J]. International Journal of Academic Research in Business and Social Sciences, 2024, 14(1).

- [30] Habibi M A, Yazdan Panah M, Vaheb S, Olfatifar M, Shaygannejad A, Mokary Y, Ghasemi M, Thapa S, Shaygannejad V, Mirmosayyeb O. Validity and reliability of the Persian version of Recce stigma scale in people with multiple sclerosis and its impact on quality of life[J]. BMC Neurology, 2024, 24(1).
- [31] Chen T. Investigating the mental health of university students during the COVID-19 pandemic in a UK university: a machine learning approach using feature permutation importance[J]. Brain Informatics, 2023, 10(1).
- [32] Ghaleb B D S. Effect of Exam-Focused and Teacher-Centered Education Systems on Students' Cognitive and Psychological Competencies[J]. International Journal of Multidisciplinary Approach Research and Science, 2024, 2(02).
- [33] Aithal P S, Aithal S. How to Increase Emotional Infrastructure of Higher Education Institutions[J]. International Journal of Management, Technology, and Social Sciences, 2023.
- [34] Kwak S. Are Only p-Values Less Than 0.05 Significant? A p-Value Greater Than 0.05 Is Also Significant![J]. Journal of Lipid and Atherosclerosis, 2023, 12(2).
- [35] Stahel W A. New relevance and significance measures to replace p-values[J]. PLoS ONE, 2021, 16(6 June).
- [36] Spake R, Bowler D E, Callaghan C T, Blowes S A, Doncaster C P, Antão L H, Nakagawa S, McElreath R, Chase J M. Understanding 'it depends' in ecology: a guide to hypothesising, visualising and interpreting statistical interactions[J]. Biological Reviews, 2023, 98(4).
- [37] Blagov Y E, Petrova-Savchenko A A. The transformation of corporate sustainability model in the context of achieving the UN SDGs: evidence from the leading Russian companies[J]. Corporate Governance (Bingley), 2021, 21(2).
- [38] Aflaki M, Flannery A, Ferreira J P, Cheng M P, Kronfli N, Marelli A, Zannad F, Brophy J, Afillalo J, Huynh T, Giannetti N, Bessissow A, Ezekowitz J A, Lopes R D, Ambrosy A P, Craig M, Sharma A. Management of Renin-Angiotensin-Aldosterone System blockade in patients admitted to hospital with confirmed coronavirus disease (COVID-19) infection (The McGill RAAS-COVID- 19): A structured summary of a study protocol for a randomized controlled trial[J]. Trials, 2021, 22(1).
- [39] Jalali M, Habibi E, Khakzad N, Aval S B, Dehghan H. A novel framework for human factors analysis and classification system for medical errors (HFACS-MES)—A Delphi study and causality analysis[J]. PLoS ONE, 2024, 19(2 February).
- [40] Podani J, Patonai K, Szabó P, Szilágyi A. Coefficients of association between nominal and fully ranked ordinal variables with applications to ecological network analysis[J]. Ecological Modelling, 2022, 466.
- [41] Hair J, Alamer A. Partial Least Squares Structural Equation Modeling (PLS-SEM) in second language and education research: Guidelines using an applied example[J]. Research Methods in Applied Linguistics, 2022, 1(3).
- [42] Lorenz-Spreen P, Oswald L, Lewandowsky S, Hertwig R. A systematic review of worldwide causal and correlational evidence on digital media and democracy[J]. Nature Human Behaviour, 2023, 7(1).
- [43] Wilms R, Mäthner E, Winnen L, Lanwehr R. Omitted variable bias: A threat to estimating causal relationships[J]. Methods in Psychology, 2021, 5.

- [44] Rickwood D J, Coleman-Rose C L. The effect of survey administration mode on youth mental health measures: Social desirability bias and sensitive questions[J]. *Heliyon*, 2023, 9(9).
- [45] Lawler I, Zimmermann G. Misalignment Between Research Hypotheses and Statistical Hypotheses: A Threat to Evidence-Based Medicine?[J]. *Topoi*, 2021, 40(2).
- [46] Gambarota F, Altoè G. Understanding Meta-Analysis Through Data Simulation With Applications to Power Analysis[J]. *Advances in Methods and Practices in Psychological Science*, 2024, 7(1).
- [47] Willoughby E A, Polderman T J C, Boutwell B B. Behavioural genetics methods[J]. *Nature Reviews Methods Primers*, 2023, 3(1).
- [48] Amadi A. Integration in a mixed-method case study of construction phenomena: from data to theory[J]. *Engineering, Construction and Architectural Management*, 2023, 30(1).