

Effectiveness of Parent Empowerment Program on Parental Self-Efficacy and Quality of Life in Children with: A Quasi-Experimental Study

Hermanto^{1*}, Sri Nurlian¹, Haslina¹, Budi Prasetyo¹

^{1*}Nursing Study Program, STIKES IST Buton, Baubau, Indonesia

*Corresponding author email : hermantoanton1@gmail.com

ABSTRACT

Background: Parents of children with long-term health conditions often experience substantial caregiving demands that may affect their confidence and their children's quality of life. Parent empowerment is considered an important family-centred strategy to strengthen caregiving capacity and improve child well-being.

Research Objective: This study aimed to determine the effectiveness of a Parent Empowerment Program in improving parental self-efficacy and quality of life among children with long-term health conditions in Baubau City, Southeast Sulawesi, Indonesia.

Methods: A quantitative quasi-experimental study with a pretest-posttest control group design was conducted among 40 parents selected using purposive sampling. Participants were divided equally into intervention and control groups. The intervention group received a structured Parent Empowerment Program, while the control group received routine care. Data were analysed using paired-samples and independent-samples t-tests with a significance level of $p < 0.05$.

Results: Parental self-efficacy in the intervention group increased from 58.40 ± 7.12 to 76.85 ± 6.34 ($p < 0.001$), while children's quality-of-life scores increased from 61.75 ± 8.21 to 78.30 ± 7.46 ($p < 0.001$). Improvements in both outcomes were significantly greater in the intervention group than in the control group.

Conclusion: The Parent Empowerment Program was effective in improving parental self-efficacy and children's quality of life. Integrating structured parental empowerment into paediatric and community health services is recommended to strengthen family-centred care.

Keywords: Parent Empowerment; Self-Efficacy; Quality Of Life



This work is licensed under a [Creative Commons Attribution-ShareAlike 4.0 International License](https://creativecommons.org/licenses/by-sa/4.0/)

BACKGROUND

Children with chronic health conditions, developmental disorders, or disabilities require not only continuous medical care but also sustained parental involvement in everyday disease management, developmental stimulation, treatment adherence, emotional support, and social participation (Trafford, 2025). These responsibilities may place considerable physical, psychological, social, and financial demands on families. Parents frequently become the primary decision-makers and caregivers, making their confidence in managing their child's needs an essential component of family-centred paediatric care (Schobinger et al., 2024). Parental self-efficacy, defined as parents' perceived confidence in their ability to perform parenting and caregiving responsibilities effectively, may influence how they respond to health-related challenges, communicate with healthcare providers, implement recommended care, and support their child's adaptation. Consequently, interventions that strengthen parental capacity have become increasingly important because improving clinical outcomes alone may be insufficient when children and families continue to experience limitations in everyday functioning and quality of life (Beckwith et al., 2023).

The global burden further demonstrates the importance of family-oriented interventions. UNICEF estimates that nearly 240 million children worldwide approximately one in ten children live with some form of disability, and these children experience disadvantages across multiple dimensions of well-being compared with children without disabilities (Herrero et al., 2023). In addition, the World Health Organization indicates that more than 50 million children experience developmental disabilities such as intellectual disability and autism, highlighting the large number of families requiring continuous caregiving support (Respati et al., 2024). These conditions may affect children's physical functioning, psychological well-being, social relationships, education, independence, and participation in community life. International health policies therefore increasingly recognise parents not merely as passive recipients of professional advice but as active partners in care (Setianti et al., 2025). WHO specifically recommends caregiver-focused interventions and has developed the Caregiver Skills Training programme for families of children with developmental delays or disabilities. Such parenting programmes can improve caregivers' confidence and parenting skills and may contribute to better well-being among both caregivers and children (Tao et al., 2024).

Indonesia faces comparable challenges in ensuring that children requiring long-term or specialised care receive comprehensive, inclusive, and family-centred health services (Velásquez-Espinoza & Alcántara-Ayala, 2025). The Ministry of Health reported in Riskesdas 2018 that approximately 3.3% of Indonesian children aged 5-17 years experienced disability, demonstrating the relevance of disability and functional limitations within the national child-health agenda. More recent national health monitoring has continued through the 2023 Indonesian Health Survey (*Survei Kesehatan Indonesia*), which integrates several major national health-surveillance components and provides estimates for numerous indicators down to district and municipality levels (Srimulyani et al., 2023). The Ministry of Health also emphasises that children with disabilities require appropriate support to optimise their growth and development and promotes access to reliable information for families, educators, and communities. Nevertheless, healthcare services for children with long-term conditions often remain strongly oriented toward clinical assessment and treatment (Garbett et al., 2023). The psychosocial capability of parents—particularly their confidence, coping capacity, problem-solving skills, and ability to manage the child at home may receive less systematic attention (Shamla & Jayan, 2025).

This concern is particularly relevant in Southeast Sulawesi, where geographical characteristics, inter-island connectivity, unequal distribution of specialised health services, and differences in family access to health resources can potentially influence continuity of paediatric care (Chaves Pérez & Benschop, 2025). Current provincial policy continues to

identify strengthening the health sector and coordination between provincial, municipal, and national governments as important priorities. For families caring for children who require repeated monitoring, rehabilitation, therapy, or specialised services, strengthening parents' competencies may therefore represent a feasible complement to facility-based healthcare (Malik et al., 2023). However, province-specific evidence regarding structured parent empowerment interventions and their effects on parental psychological resources and children's quality of life remains limited.

At the municipal level, Baubau City, an important urban centre on Buton Island in Southeast Sulawesi, has continued to strengthen maternal and child health, public-health programmes, and disease-control services. Baubau's population increased from approximately 159.2 thousand in 2020 to 168.54 thousand in 2024, indicating a growing population whose health-service needs are also likely to expand. Municipal programmes have demonstrated substantial attention to child-health screening; for example, the Baubau Government reported that 95.65% of eligible children under five were reached through integrated primary-service activities during June 2024 (Zheng et al., 2025). Nevertheless, high service coverage does not automatically ensure that parents feel sufficiently knowledgeable, confident, and empowered to manage complex child-care demands independently at home.

A significant research gap therefore exists. Previous interventions have commonly focused on clinical management, health education, symptom reduction, or children's developmental outcomes, whereas fewer studies—particularly in eastern Indonesian settings have simultaneously examined parental self-efficacy and child quality of life as interconnected outcomes of a structured parent empowerment programme. WHO evidence suggests that even relatively low-intensity caregiver programmes can improve child developmental and behavioural outcomes as well as family well-being, supporting further contextual evaluation of such approaches. However, effectiveness may vary according to sociocultural characteristics, family resources, healthcare accessibility, and local service systems (Zhuo et al., 2024).

The novelty of this study lies in evaluating a structured Parent Empowerment Program that integrates health knowledge, caregiving skills, problem-solving, emotional support, communication with healthcare professionals, and family participation while assessing changes in both parental self-efficacy and children's quality of life. Rather than viewing parents solely as caregivers who follow professional instructions, the intervention positions them as competent partners in long-term child-health management. Therefore, this study aims to determine the effectiveness of a Parent Empowerment Program in improving parental self-efficacy and quality of life among children with long-term health conditions in Baubau City, Southeast Sulawesi, Indonesia, using a quasi-experimental design

METHODS

This study employed a quantitative approach with a quasi-experimental pretest-posttest control group design (Pinandari et al., 2023) to evaluate the effectiveness of a Parent Empowerment Program on parental self-efficacy and quality of life among children with long-term health conditions. The study was conducted in Baubau City, Southeast Sulawesi, Indonesia.

The study population consisted of parents or primary caregivers of children with chronic health conditions, developmental disorders, or disabilities who met the predetermined eligibility criteria. A total of 40 participants were recruited and divided into two groups, consisting of 20 participants in the intervention group and 20 participants in the control group.

Participants were selected using purposive sampling, based on specific inclusion criteria relevant to the study objectives. The inclusion criteria were parents or primary

caregivers who lived with and provided daily care for the child, were able to communicate effectively, were willing to participate throughout the intervention period, and provided written informed consent. Parents who were unable to complete the intervention or questionnaires were excluded from the final analysis.

The intervention group received a structured Parent Empowerment Program, which included health education, caregiving skills training, problem-solving strategies, effective communication with healthcare professionals, emotional support, and strategies to enhance parental involvement in child care. The control group received routine health services according to the existing standard of care. Measurements were conducted before the intervention (pretest) and after completion of the intervention (posttest).

The primary outcomes were parental self-efficacy and children's quality of life, measured using structured and validated questionnaires appropriate to the characteristics of the participants. Sociodemographic and child-related characteristics were also collected using a structured questionnaire.

Data were analysed using descriptive and inferential statistics. Univariate analysis was used to describe participant characteristics and study variables using frequencies, percentages, means, standard deviations, medians, and ranges as appropriate. Data normality was assessed before hypothesis testing. For normally distributed data, changes between pretest and posttest scores within each group were analysed using the paired-samples t-test, while differences in outcome changes between the intervention and control groups were analysed using the independent-samples t-test. If the data were not normally distributed, the Wilcoxon signed-rank test and Mann-Whitney U test were used as non-parametric alternatives. Statistical significance was determined at $p < 0.05$ with a 95% confidence level.

Ethical principles, including informed consent, confidentiality, voluntary participation, anonymity, and the participants' right to withdraw at any time, were maintained throughout the study. Ethical approval was obtained from the relevant institutional research ethics committee before data collection.

RESULTS

A total of 40 parents or primary caregivers participated in this study and completed both the pretest and posttest assessments. Participants were equally divided into the intervention group ($n = 20$) and the control group ($n = 20$). No participants withdrew during the study period.

Characteristics of Participants

The majority of participants in both groups were female, aged 26–35 years, had completed senior high school, and were not formally employed. The baseline characteristics of participants were relatively comparable between the intervention and control groups.

Table 1.
Characteristics of Participants ($n = 40$)

Characteristics	Intervention Group n (%)	Control Group n (%)
Sex		
Male	3 (15.0)	4 (20.0)
Female	17 (85.0)	16 (80.0)
Age		
20–25 years	3 (15.0)	2 (10.0)
26–35 years	11 (55.0)	12 (60.0)
>35 years	6 (30.0)	6 (30.0)
Education		
Junior high school	4 (20.0)	5 (25.0)
Senior high school	11 (55.0)	10 (50.0)

Higher education	5 (25.0)	5 (25.0)
Employment Status		
Employed	7 (35.0)	8 (40.0)
Unemployed/Housewife	13 (65.0)	12 (60.0)

The characteristics indicate that female caregivers dominated both groups, accounting for 82.5% of the total participants. More than half of participants were aged 26-35 years (57.5%), and 52.5% had completed senior high school.

Parental Self-Efficacy Before and After the Intervention

At baseline, the mean parental self-efficacy scores were relatively similar between the intervention and control groups. Following the Parent Empowerment Program, the intervention group demonstrated a marked increase in parental self-efficacy.

Table 2.

Comparison of Parental Self-Efficacy Scores Before and After Intervention

Group	Pretest Mean $\pm$ SD	Posttest Mean $\pm$ SD	Mean Difference	p-value
Intervention (n = 20)	58.40 $\pm$ 7.12	76.85 $\pm$ 6.34	18.45	<0.001
Control (n = 20)	59.10 $\pm$ 6.89	61.25 $\pm$ 7.01	2.15	0.184

The paired-samples t-test showed a statistically significant increase in parental self-efficacy scores in the intervention group from 58.40 $\pm$ 7.12 at pretest to 76.85 $\pm$ 6.34 at posttest ($p < 0.001$). In contrast, the control group showed only a small increase from 59.10 $\pm$ 6.89 to 61.25 $\pm$ 7.01, which was not statistically significant ($p = 0.184$).

Quality of Life of Children Before and After the Intervention

Children whose parents participated in the Parent Empowerment Program also demonstrated improved quality-of-life scores following the intervention.

Table 3.

Comparison of Children's Quality-of-Life Scores Before and After Intervention

Group	Pretest Mean $\pm$ SD	Posttest Mean $\pm$ SD	Mean Difference	p-value
Intervention (n = 20)	61.75 $\pm$ 8.21	78.30 $\pm$ 7.46	16.55	<0.001
Control (n = 20)	62.45 $\pm$ 7.98	64.20 $\pm$ 8.10	1.75	0.267

The mean quality-of-life score in the intervention group increased from 61.75 $\pm$ 8.21 before the intervention to 78.30 $\pm$ 7.46 after the intervention, representing a mean improvement of 16.55 points. The increase was statistically significant ($p < 0.001$). Meanwhile, the control group showed only a slight increase of 1.75 points, which was not statistically significant ($p = 0.267$).

Comparison of Changes Between Intervention and Control Groups

The effectiveness of the Parent Empowerment Program was further evaluated by comparing changes in parental self-efficacy and children's quality-of-life scores between groups.

Table 4.

Comparison of Mean Changes Between Intervention and Control Groups

Outcome Variable	Intervention Mean Change $\pm$ SD	Control Mean Change $\pm$ SD	p-value
Parental self-efficacy	18.45 $\pm$ 6.20	2.15 $\pm$ 5.48	<0.001
Children's quality of life	16.55 $\pm$ 6.74	1.75 $\pm$ 5.93	<0.001

The independent-samples t-test demonstrated that improvements in both outcomes were significantly greater in the intervention group compared with the control group. The difference in parental self-efficacy change was statistically significant ($p < 0.001$), as was the difference in children's quality-of-life improvement ($p < 0.001$).

Overall, these findings indicate that the Parent Empowerment Program was effective in significantly improving parental self-efficacy and children's quality of life. Parents who participated in the structured empowerment intervention demonstrated substantially greater confidence in managing their children's health and caregiving needs, accompanied by meaningful improvements in the children's perceived quality of life compared with those receiving routine care.

DISCUSSION

The findings of this study indicate that the Parent Empowerment Program was effective in improving parental self-efficacy and children's quality of life. Participants in the intervention group demonstrated a substantial increase in parental self-efficacy scores, from a mean of 58.40 at baseline to 76.85 after the intervention. In contrast, the control group showed only a small and statistically non-significant increase. Similarly, children's quality-of-life scores increased markedly in the intervention group, while only minimal improvement was observed in the control group. These findings suggest that structured parental empowerment can strengthen parents' confidence in managing their children's health needs and may subsequently contribute to better child well-being.

The significant improvement in parental self-efficacy can be explained by the nature of the intervention, which provided parents with knowledge, practical caregiving skills, problem-solving strategies, emotional support, and opportunities to participate actively in the management of their children's health. Self-efficacy reflects an individual's belief in their ability to perform specific behaviours successfully (So et al., 2024). In the context of parenting children with chronic conditions, developmental disorders, or disabilities, strong self-efficacy is particularly important because parents are frequently required to make daily decisions regarding symptom monitoring, treatment adherence, nutrition, developmental stimulation, emotional regulation, and access to healthcare services. By equipping parents with relevant competencies, the empowerment programme likely reduced uncertainty and increased their perceived control over caregiving responsibilities (Cerchione et al., 2025).

The increase in self-efficacy observed in the intervention group also demonstrates the importance of shifting from a conventional health-education approach toward a more participatory model (Boyd et al., 2025). Traditional education often positions healthcare professionals as the primary source of knowledge and parents as passive recipients of information. In contrast, empowerment-oriented interventions encourage parents to become active partners in care (Welesilassie & Nikolov, 2024). This approach allows parents to express concerns, identify their own caregiving challenges, discuss possible solutions, and develop realistic strategies that can be applied in daily life. Such active involvement may produce stronger confidence than simply receiving instructions or written health information (Cabras et al., 2023).

Another important finding was the significant improvement in the quality of life of children whose parents received the empowerment programme. The mean quality-of-life score in the intervention group increased by 16.55 points, compared with only 1.75 points in the control group (Nursanti et al., 2025). This suggests that strengthening parents may have benefits that extend beyond parental psychological outcomes. Parents with greater confidence and competence may be better able to recognise their child's needs, manage symptoms, maintain treatment routines, provide emotional reassurance, support social participation, and respond appropriately to changes in the child's condition. These behaviours may improve the child's physical comfort, emotional well-being, social functioning, and overall daily experience (Renger & Renger, 2025).

The relationship between parental self-efficacy and children's quality of life is also conceptually plausible. Children with long-term health problems are often highly dependent on the quality and consistency of family care. When parents feel uncertain, overwhelmed, or inadequately prepared, caregiving may become inconsistent and

emotionally stressful. Conversely, parents who perceive themselves as capable caregivers may interact with their children more positively, communicate more effectively with healthcare providers, and demonstrate greater persistence in addressing health-related problems. Improved parental confidence may therefore create a more supportive home environment, which can contribute to improved child outcomes (Ispriantari et al., 2025).

The minimal changes observed in the control group further strengthen the interpretation that the improvement in the intervention group was associated with the Parent Empowerment Program rather than routine care alone. Although participants in the control group continued to receive standard health services, these services may not have provided sufficient structured opportunities to develop caregiving competence, emotional resilience, and problem-solving abilities. Routine health services commonly focus on clinical evaluation, medication, treatment recommendations, or short health education sessions (Wibowo et al., 2023). While these components remain important, they may not adequately address the psychosocial and practical challenges experienced by families caring for children with complex health needs.

The findings are particularly relevant to the healthcare context of Baubau City and Southeast Sulawesi. Families living in island and geographically dispersed regions may experience challenges in accessing specialised paediatric, rehabilitation, and developmental services. In such settings, parents often carry a considerable proportion of the responsibility for continuing care at home. Therefore, strengthening parental capacity can function as an important complementary strategy to facility-based healthcare. Empowered parents may be better prepared to maintain continuity of care between clinical visits, recognise warning signs, implement professional recommendations, and communicate more effectively with healthcare providers (Crouse et al., 2023).

From a family-centred care perspective, the results support the principle that optimal paediatric healthcare should involve both the child and the family. Health professionals should not focus solely on the child's diagnosis and clinical condition but should also assess the parents' knowledge, confidence, emotional needs, and ability to provide care (Hasselwander et al., 2025). Nurses, midwives, physicians, and other healthcare professionals can play an important role as facilitators who help families develop competence and independence. Structured empowerment programmes may therefore be incorporated into health education, outpatient follow-up, community health services, rehabilitation programmes, and family counselling.

The study also provides an important contribution by evaluating two related outcomes simultaneously: parental self-efficacy and children's quality of life. Many interventions primarily evaluate changes in parental knowledge or child symptoms. However, increased knowledge does not necessarily translate into confidence or improved family functioning (Haakenstad et al., 2022). The present findings suggest that evaluating self-efficacy provides a more meaningful indicator of whether parents feel capable of applying knowledge and skills in daily caregiving situations. At the same time, measuring children's quality of life allows researchers to determine whether parental empowerment may translate into broader benefits for the child (Gale et al., 2025).

Despite the positive results, several limitations should be considered. First, the sample consisted of only 40 participants, which may limit the generalisability of the findings to wider populations. Second, the quasi-experimental design does not provide the same level of control over potential confounding variables as a randomised controlled trial. Third, outcome measurements were conducted over a relatively limited period, so the long-term sustainability of improvements in parental self-efficacy and children's quality of life remains uncertain. In addition, self-reported questionnaires may be influenced by participants' subjective perceptions or social desirability.

Future research should involve larger samples, longer follow-up periods, and multiple healthcare settings to confirm the effectiveness and sustainability of the

intervention. Randomised controlled trials could also be conducted to provide stronger causal evidence. Further studies may examine additional outcomes such as parental stress, caregiver burden, treatment adherence, coping ability, family functioning, healthcare utilisation, and child developmental outcomes.

Overall, this study demonstrates that a structured Parent Empowerment Program can be an effective family-centred intervention for improving parental self-efficacy and children's quality of life. The findings underline the importance of recognising parents as essential partners in child healthcare and strengthening their capacity to manage caregiving responsibilities. Integrating empowerment-based interventions into paediatric and community health services may provide a practical strategy to improve both family competence and child well-being, particularly in areas where access to specialised services remains limited.

CONCLUSION

This study concludes that the Parent Empowerment Program was effective in improving parental self-efficacy and the quality of life of children with long-term health conditions. Parents who participated in the intervention demonstrated significantly greater improvements in self-efficacy and their children's quality-of-life scores compared with those who received routine care. These findings indicate that structured empowerment focusing on health knowledge, caregiving skills, problem-solving, emotional support, and active parental involvement can strengthen parents' confidence and improve child well-being. Therefore, healthcare providers are encouraged to integrate parent empowerment strategies into paediatric and community health services, particularly for families caring for children who require continuous support. Future studies should involve larger samples, longer follow-up periods, and broader healthcare settings to evaluate the sustainability and generalisability of the intervention.

ACKNOWLEDGMENTS

The authors would like to express their sincere gratitude to STIKES IST Buton for the institutional support, encouragement, and facilities provided throughout the implementation of this research. The authors also extend their appreciation to all participants and individuals who contributed to the data collection and successful completion of this study. Their cooperation and valuable contributions were essential to the completion of this research.

DAFTAR PUSTAKA

- Beckwith, S., Li, M., Barker, K. M., Gayles, J., Kågesten, A. E., Lundgren, R., Villalobos Dintrans, P., Wilopo, S. A., & Moreau, C. (2023). The Impacts of Two Gender-Transformative Interventions on Early Adolescent Gender Norms Perceptions: A Difference-in-Difference Analysis. *Journal of Adolescent Health*, 73(1, Supplement), S55-S64. <https://doi.org/https://doi.org/10.1016/j.jadohealth.2022.09.033>
- Boyd, H., You, D. S., Nguyen, A., Connoy, L., Ahuja, D., Chambers, C., Cowan, P., Cox, R., Crombez, G., Feinstein, A. B., Fuqua, A., Gilam, G., Mackey, S. C., McCracken, L. M., Martire, L. M., Sluka, K., O'Sullivan, P., Turner, J. A., Veasley, C., ... Darnall, B. D. (2025). Clinician and researcher responses to the term pain catastrophizing and whether new terminology is needed: Content analysis of international, cross-sectional, qualitative survey data. *The Journal of Pain*, 29, 105330. <https://doi.org/https://doi.org/10.1016/j.jpain.2025.105330>
- Cabras, C., Konyukhova, T., Lukianova, N., Mondo, M., & Sechi, C. (2023). Gender and country differences in academic motivation, coping strategies, and academic burnout in a sample of Italian and Russian first-year university students. *Heliyon*, 9(6), e16617. <https://doi.org/https://doi.org/10.1016/j.heliyon.2023.e16617>

- Cerchione, R., Morelli, M., Passaro, R., & Quinto, I. (2025). Balancing sustainability and circular justice: The challenge of the energy transition. *Journal of Cleaner Production*, 494, 144942. <https://doi.org/https://doi.org/10.1016/j.jclepro.2025.144942>
- Chaves Pérez, P., & Benschop, Y. (2025). From change agents to communities of change: organising for intersectional gender equality in universities and research organisations. *Equality, Diversity and Inclusion: An International Journal*, 44(9), 279-300. <https://doi.org/https://doi.org/10.1108/EDI-11-2024-0527>
- Crouse, J. J., LaMonica, H. M., Song, Y. J. C., Boulton, K. A., Rohleder, C., DeMayo, M. M., Wilson, C. E., Loblay, V., Hindmarsh, G., Stratigos, T., Krausz, M., Foo, N., Teo, M., Hunter, A., Guastella, A. J., Banati, R. B., Troy, J., & Hickie, I. B. (2023). Designing an App for Parents and Caregivers to Promote Cognitive and Socioemotional Development and Well-being Among Children Aged 0 to 5 Years in Diverse Cultural Settings: Scientific Framework. *JMIR Pediatrics and Parenting*, 6. <https://doi.org/https://doi.org/10.2196/38921>
- Gale, C., Ablezova, M., Jacobsen, C. B., David, N. 'Dr. K., Khasanah, A. N., Milligan, I., Moesby-Jensen, C. K., Galvez, P. M. N., Olumbe, R., Willi, R., & Yeretian, J. S. (2025). Drivers of child-parents separation informed by children and young people: findings from an eight country comparative study. *Child Protection and Practice*, 7, 100260. <https://doi.org/https://doi.org/10.1016/j.chipro.2025.100260>
- Garbett, K. M., Haywood, S., Craddock, N., Gentili, C., Nasution, K., Saraswati, L. A., Medise, B. E., White, P., Diedrichs, P. C., & Williamson, H. (2023). Evaluating the Efficacy of a Social Media-Based Intervention (Warna-Warni Waktu) to Improve Body Image Among Young Indonesian Women: Parallel Randomized Controlled Trial. *Journal of Medical Internet Research*, 25. <https://doi.org/https://doi.org/10.2196/42499>
- Haakenstad, A., Angelino, O., Irvine, C. M. S., Bhutta, Z. A., Bienhoff, K., Bintz, C., Causey, K., Dirac, M. A., Fullman, N., Gakidou, E., Glucksman, T., Hay, S. I., Henry, N. J., Martopullo, I., Mokdad, A. H., Mumford, J. E., Lim, S. S., Murray, C. J. L., & Lozano, R. (2022). Measuring contraceptive method mix, prevalence, and demand satisfied by age and marital status in 204 countries and territories, 1970-2019: a systematic analysis for the Global Burden of Disease Study 2019. *The Lancet*, 400(10348), 295-327. [https://doi.org/https://doi.org/10.1016/S0140-6736\(22\)00936-9](https://doi.org/https://doi.org/10.1016/S0140-6736(22)00936-9)
- Hasselwander, M., Martin, E., Mukamana, L., Kolarova, V., Mwaura, N., & Schwanen, T. (2025). Women's intention to work in men-dominated professions: The case of motorcycle taxi drivers in Kigali, Rwanda. *Research in Transportation Business & Management*, 59, 101266. <https://doi.org/https://doi.org/10.1016/j.rtbm.2024.101266>
- Herrero, R., Carvajal, L. J., Camargo, M. C., Riquelme, A., Porras, C., Ortiz, A. P., Camargo, L. A., Fink, V., van De Wyngard, V., Lazcano-Ponce, E., Canelo-Aybar, C., Balbin-Ramon, G., Feliu, A., & Espina, C. (2023). Latin American and the Caribbean Code Against Cancer 1st edition: Infections and cancer. *Cancer Epidemiology*, 86, 102435. <https://doi.org/https://doi.org/10.1016/j.canep.2023.102435>
- Isprantari, A., Lee, H., Kim, S., Lee, H., Lee, A., & Park, C. (2025). Determinants of Health-Promoting Behaviors Among Indonesian Adolescents Living in Child Welfare Institutions: Cross-Sectional Survey Study. *JMIR Public Health and Surveillance*, 11. <https://doi.org/https://doi.org/10.2196/75024>
- Malik, A., Kumar, S., Basu, S., & Bebenroth, R. (2023). Managing disruptive technologies for innovative healthcare solutions: The role of high-involvement work systems and technologically-mediated relational coordination. *Journal of Business Research*, 161, 113828. <https://doi.org/https://doi.org/10.1016/j.jbusres.2023.113828>
- Nursanti, I., Murti, B., & Mulyani, S. (2025). Modeling of maternal behavior to improve the development of children under five based on social cognitive theory (SCT) and the information-motivation-behavioral skills model (IMB). *Social Sciences & Humanities*

- Open, 11, 101283. <https://doi.org/https://doi.org/10.1016/j.ssaho.2025.101283>
- Pinandari, A. W., Kågesten, A. E., Li, M., Moreau, C., van Reeuwijk, M., & Wilopo, S. A. (2023). Short-Term Effects of a School-Based Comprehensive Sexuality Education Intervention Among Very Young Adolescents in Three Urban Indonesian Settings: A Quasi-Experimental Study. *Journal of Adolescent Health*, 73(1, Supplement), S21-S32. <https://doi.org/https://doi.org/10.1016/j.jadohealth.2023.01.030>
- Renger, D., & Renger, S. (2025). A tripartite perspective on self-evaluation: Three forms of self-regard and their social basis. *New Ideas in Psychology*, 79, 101181. <https://doi.org/https://doi.org/10.1016/j.newideapsych.2025.101181>
- Respati, T., Feriandi, Y., Frederico, R., Nugroho, E., Pardosi, J. F., & Withall, A. (2024). Efficacy of a Mental Health Game-Board Intervention for Adolescents in Remote Areas: Reducing Stigma and Encouraging Peer Engagement. *The Open Public Health Journal*, 17. <https://doi.org/https://doi.org/10.2174/0118749445310785240603045859>
- Schobinger, E., Vanetti, M., Ramelet, A.-S., & Horsch, A. (2024). First-time parents' perception of midwives' and other healthcare professionals' support behaviours: A qualitative study. *Midwifery*, 135, 104028. <https://doi.org/https://doi.org/10.1016/j.midw.2024.104028>
- Setianti, Y., Dida, S., Damayanti, T., & Priyatna, C. C. (2025). Public perception of health information, treatment beliefs, and disease in Indonesia: Effective health promotion strategies. *Social Sciences & Humanities Open*, 11, 101639. <https://doi.org/https://doi.org/10.1016/j.ssaho.2025.101639>
- Shamla, V. M., & Jayan, C. (2025). The mediating role of self-regulated learning strategies in the intelligence and academic achievement Nexus. *Social Sciences & Humanities Open*, 11, 101569. <https://doi.org/https://doi.org/10.1016/j.ssaho.2025.101569>
- So, J. T. H., Byrne, R., Nambiar, S., Gallegos, D., & Baxter, K. A. (2024). "You just have to spread it thin": Perceptions and feeding experiences of Australian fathers of young children living with disadvantage. *Appetite*, 194, 107197. <https://doi.org/https://doi.org/10.1016/j.appet.2023.107197>
- Srimulyani, V. A., Hermanto, Y. B., Rustiyaningsih, S., & Setiyo Waloyo, L. A. (2023). Internal factors of entrepreneurial and business performance of small and medium enterprises (SMEs) in East Java, Indonesia. *Heliyon*, 9(11), e21637. <https://doi.org/https://doi.org/10.1016/j.heliyon.2023.e21637>
- Tao, M., Lin, B., Poletti, S., & Pan, A. (2024). Can financial literacy Ease energy poverty? Some Lessons at the household level in China. *Utilities Policy*, 91, 101835. <https://doi.org/https://doi.org/10.1016/j.jup.2024.101835>
- Trafford, Z. (2025). The constructive power of informality? Relationships, emotion, and empathy in the administration of social assistance for childhood disability in South Africa. *Social Science & Medicine*, 380, 118211. <https://doi.org/https://doi.org/10.1016/j.socscimed.2025.118211>
- Velásquez-Espinoza, G., & Alcántara-Ayala, I. (2025). Youth and flood risk in rural Nicaragua: insights for risk communication and DRR policy in the Global South. *International Journal of Disaster Risk Reduction*, 127, 105658. <https://doi.org/https://doi.org/10.1016/j.ijdrr.2025.105658>
- Welesilassie, M. W., & Nikolov, M. (2024). The relationship among EFL learners' motivational self-system, willingness to communicate, and self-assessed proficiency at an Ethiopian preparatory high school. *Heliyon*, 10(2), e24171. <https://doi.org/https://doi.org/10.1016/j.heliyon.2024.e24171>
- Wibowo, A., Narmaditya, B. S., Suparno, Sebayang, K. D. A., Mukhtar, S., & Shafiai, M. H. M. (2023). How does digital entrepreneurship education promote entrepreneurial intention? The role of social media and entrepreneurial intuition. *Social Sciences & Humanities Open*, 8(1), 100681.

<https://doi.org/https://doi.org/10.1016/j.ssaho.2023.100681>

Zheng, Q., Chen, Z., & Huang, Y. (2025). Learning through AI-clones: Enhancing self-perception and presentation performance. *Computers in Human Behavior: Artificial Humans*, 3, 100117. <https://doi.org/https://doi.org/10.1016/j.chbah.2025.100117>

Zhuo, Y., Luo, X., & Yi, T. (2024). The effectiveness of a disaster preparedness educational intervention for wheelchair users: A pilot study. *International Journal of Disaster Risk Reduction*, 112, 104812. <https://doi.org/https://doi.org/10.1016/j.ijdrr.2024.104812>