

REFERENCES

- Abdullah, A.-N., & Rahman, S. (2021). Social Impacts of a Mega-Dam Project as Perceived by Local, Resettled and Displaced Communities: A Case Study of Merowe Dam, Sudan. *Economies*, 9(4), 140. <https://doi.org/10.3390/economies9040140>
- Abt, C. A. (1979). *Serious Games*; Viking.
- Abu-Alhaija, A. S. (2019). From epistemology to structural equation modeling: An essential guide in understanding the principles of research philosophy in selecting the appropriate methodology. *Australian Journal of Basic and Applied Sciences*, 13(9), 122–128. <https://doi.org/10.22587/ajbas.2019.13.9.12>
- Adamo, N., Al-Ansari, N., Sissakian, V., Laue, J., & Knutsson, S. (2020). Dam Safety: Technical Problems of Ageing Concrete Dams. *Journal of Earth Sciences and Geotechnical Engineering*, 10(6), 241–279.
- Ahlin, E. (2019). *Semi-structured interviews with expert practitioners: Their validity and significant contribution to translational research*. SAGE Publications Ltd. <https://doi.org/10.4135/9781526466037>
- Al Ruheili, A., Dahm, R., & Radke, J. (2019). Wadi flood impact assessment of the 2002 cyclonic storm in Dhofar, Oman under present and future sea level conditions. *Journal of Arid Environments*, 165, 73–80. <https://doi.org/10.1016/j.jaridenv.2019.04.002>
- Ali, M. M. (2024). Case Study: Satya Nadella's Leadership at Microsoft. *Issue 12. Ser*, 26, 74–79. <https://doi.org/10.9790/487X-2612027479>
- Alvi, I. A., & Alvi, I. S. (2023). Why dams fail: a systems perspective and case study. *Civil Engineering and Environmental Systems*, 40(3), 150–175. <https://doi.org/10.1080/10286608.2023.2283704>
- Amadae, S. M., & Watts, C. J. (2023). Red Queen and Red King Effects in cultural agent-based modeling: Hawk Dove Binary and Systemic Discrimination. *The Journal of Mathematical Sociology*, 47(4), 283–310. <https://doi.org/10.1080/0022250X.2021.2012668>
- Anshuka, A., van Ogtrop, F. F., Sanderson, D., & Leao, S. Z. (2022). A systematic review of agent-based model for flood risk management and assessment using the ODD protocol. *Natural Hazards*, 112(3), 2739–2771. <https://doi.org/10.1007/s11069-022-05286-y>
- Arlikatti, S., Maghelal, P., Agnimitra, N., & Chatterjee, V. (2018). Should I stay or should I go? Mitigation strategies for flash flooding in India. *International Journal of Disaster Risk Reduction*, 27, 48–56. <https://doi.org/10.1016/j.ijdr.2017.09.019>
- Arnab, S., Lim, T., Carvalho, M. B., Bellotti, F., de Freitas, S., Louchart, S., Suttie, N., Berta, R., & De Gloria, A. (2015). Mapping learning and game mechanics for serious games analysis. *British Journal of Educational Technology*, 46(2), 391–411. <https://doi.org/10.1111/bjet.12113>
- Aromataris, E., & Riitano, D. (2014). Systematic reviews. *AJN, American Journal of Nursing*, 114(5), 49–56. <https://doi.org/10.1097/01.NAJ.0000446779.99522.f6>

- Association of State Dam Safety Officials (ASDSO). (2017). *The Importance of National Dam Safety Awareness Day*. <https://damsafety.org/awareness-center#:~:text=National%20Dam%20Safety%20Awareness%20Day,best%20practices%20for%20dam%20safety>
- Bashar, N. A. M., Zainol, M. R. R. M. A., Aziz, M. S. A., Mazlan, A. Z. A., & Zawawi, M. H. (2023). *Dam Safety: Highlighted Issues and Reliable Assessment for the Sustainable Dam Infrastructure* (pp. 871–880). https://doi.org/10.1007/978-981-99-3708-0_61
- Baxter, P., & Jack, S. (2008). Qualitative case study methodology: Study design and implementation for novice researchers. *The Qualitative Report*, 13(4), 544–559.
- Becher, M. A., Grimm, V., Thorbek, P., Horn, J., Kennedy, P. J., & Osborne, J. L. (2014). <scp>BEEHAVE</scp> : a systems model of honeybee colony dynamics and foraging to explore multifactorial causes of colony failure. *Journal of Applied Ecology*, 51(2), 470–482. <https://doi.org/10.1111/1365-2664.12222>
- Becker, J. S., Paton, D., Johnston, D. M., & Ronan, K. R. (2012). A model of household preparedness for earthquakes: how individuals make meaning of earthquake information and how this influences preparedness. *Natural Hazards*, 64(1), 107–137. <https://doi.org/10.1007/s11069-012-0238-x>
- Begnudelli, L., & Sanders, B. F. (2007). Simulation of the St. Francis Dam-Break Flood. *Journal of Engineering Mechanics*, 133(11), 1200–1212. [https://doi.org/10.1061/\(ASCE\)0733-9399\(2007\)133:11\(1200\)](https://doi.org/10.1061/(ASCE)0733-9399(2007)133:11(1200))
- Bellotti, F., Berta, R., & De Gloria, A. (2010). Designing Effective Serious Games: Opportunities and Challenges for Research. *International Journal of Emerging Technologies in Learning (IJET)*, 5(SI3), 22. <https://doi.org/10.3991/ijet.v5s3.1500>
- Bellotti, F., Kapralos, B., Lee, K., Moreno-Ger, P., & Berta, R. (2013). Assessment in and of Serious Games: An Overview. *Advances in Human-Computer Interaction*, 2013, 1–11. <https://doi.org/10.1155/2013/136864>
- Bernardini, G., Finizio, F., Postacchini, M., & Quagliarini, E. (2021). Assessing the flood risk to evacuees in outdoor built environments and relative risk reduction strategies. *International Journal of Disaster Risk Reduction*, 64, 102493. <https://doi.org/10.1016/j.ijdr.2021.102493>
- Berndt, A. E. (2020). Sampling methods. *Journal of Human Lactation*, 36(2), 224–226. <https://doi.org/10.1177/0890334420906850>
- Bharath, A., Shivapur, A. V, Hiremath, C. G., & Maddamsetty, R. (2021). Dam break analysis using HEC-RAS and HEC-GeoRAS: A case study of Hidkal dam, Karnataka state, India. *Environmental Challenges*, 5, 100401. <https://doi.org/10.1016/j.envc.2021.100401>
- Bharti, M. K., Sharma, M., & Islam, N. (2020). Study on the Dam & Reservoir, and Analysis of Dam Failures: A Data Base Approach. *International Research Journal of Engineering and Technology (IRJET)*, 7(5), 1661–1669.

- Bonabeau E. (2002). Agent-based modeling: Methods and techniques for simulating human systems. *Proceedings of the National Academy of Sciences*, 7280–7287.
- Borowska-Stefańska, M., Kowalski, M., Turoboś, F., & Wiśniewski, S. (2019). Optimisation patterns for the process of a planned evacuation in the event of a flood. *Environmental Hazards*, 18(4), 335–360. <https://doi.org/10.1080/17477891.2019.1593816>
- Cajanding, R. J. (2017). Effects of a Structured Discharge Planning Program on Perceived Functional Status, Cardiac Self-efficacy, Patient Satisfaction, and Unexpected Hospital Revisits Among Filipino Cardiac Patients. *Journal of Cardiovascular Nursing*, 32(1), 67–77. <https://doi.org/10.1097/JCN.0000000000000303>
- Campolongo, F., Cariboni, J., & Saltelli, A. (2007). An effective screening design for sensitivity analysis of large models. *Environmental Modelling & Software*, 22(10), 1509–1518. <https://doi.org/10.1016/j.envsoft.2006.10.004>
- Cannata, M., & Marzocchi, R. (2012). Two-dimensional dam break flooding simulation: a GIS-embedded approach. *Natural Hazards*, 61(3), 1143–1159. <https://doi.org/10.1007/s11069-011-9974-6>
- Cao, Z., Huang, W., Pender, G., & Liu, X. (2014). Even more destructive: cascade dam break floods. *Journal of Flood Risk Management*, 7(4), 357–373. <https://doi.org/10.1111/jfr3.12051>
- Carmo, F. F. do, Kamino, L. H. Y., Junior, R. T., Campos, I. C. de, Carmo, F. F. do, Silvino, G., Castro, K. J. da S. X. de, Mauro, M. L., Rodrigues, N. U. A., Miranda, M. P. de S., & Pinto, C. E. F. (2017). Fundão tailings dam failures: the environment tragedy of the largest technological disaster of Brazilian mining in global context. *Perspectives in Ecology and Conservation*, 15(3), 145–151. <https://doi.org/10.1016/j.pecon.2017.06.002>
- Chan, N. W., Ghani, A. A., Samat, N., Hasan, N. N. N., & Tan, M. L. (2020). *Integrating Structural and Non-structural Flood Management Measures for Greater Effectiveness in Flood Loss Reduction in the Kelantan River Basin, Malaysia* (pp. 1151–1162). https://doi.org/10.1007/978-3-030-32816-0_87
- Chege, K., & Otieno, O. (2020). Research philosophy design and methodologies: A systematic review of research paradigms in information technology. *Global Scientific Journals*, 8(5). www.globalscientificjournal.com
- Chigbu, U. E., Atiku, S. O., & Du Plessis, C. C. (2023). The science of literature reviews: Searching, identifying, selecting, and synthesizing. *Publications*, 11(1), 2. <https://doi.org/10.3390/publications11010002>
- Choi, J.-K., Morrison, D., Hallinan, K. P., & Brecha, R. J. (2014). Economic and environmental impacts of community-based residential building energy efficiency investment. *Energy*, 78, 877–886. <https://doi.org/10.1016/j.energy.2014.10.082>
- Coates, G., Li, C., Ahilan, S., Wright, N., & Alharbi, M. (2019). Agent-based modeling and simulation to assess flood preparedness and recovery of manufacturing small and

- medium-sized enterprises. *Engineering Applications of Artificial Intelligence*, 78, 195–217. <https://doi.org/10.1016/j.engappai.2018.11.010>
- Cogoni, F., Bernard, D., Kazhen, R., Valitutti, S., Lobjois, V., & Cussat-Blanc, S. (2023). *ISiCell: involving biologists in the design process of agent-based models in cell biology*. <https://doi.org/10.1101/2023.06.30.547165>
- Costa, J. E. (1985). *Floods from dam failures (USGS Open-File Report 85-560)*.
- Courtnadge, A., Gosden, J., & Brown, A. (2017). *Guide to Drawdown Capacity for Reservoir Safety and Emergency Planning SC130001 Volume 1– Main Guide*. Environment Agency. <https://www.gov.uk/flood-and-coastal-erosion-risk-management-research-reports/guide-to-drawdown-capacity-for-reservoir-safety-and-emergency-planning>
- Creswell, J. W. (2013). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). SAGE Publications.
- Crooks, A. T., & Heppenstall, A. J. (2012). Introduction to Agent-Based Modelling. In *Agent-Based Models of Geographical Systems* (pp. 85–105). Springer Netherlands. https://doi.org/10.1007/978-90-481-8927-4_5
- Crouse, K. N., Desai, N. P., Cassidy, K. A., Stahler, E. E., Lehman, C. L., & Wilson, M. L. (2022). Larger territories reduce mortality risk for chimpanzees, wolves, and agents: Multiple lines of evidence in a model validation framework. *Ecological Modelling*, 471, 110063. <https://doi.org/10.1016/j.ecolmodel.2022.110063>
- Daud, N. M., Madzman, A. U., Hassan, S. H., Bakar, A. A. A., Tutar, N., Noh, M. K. M., Manan, E. A., & Hamzah, A. F. (2021). Downstream Community Awareness of the Failure Risk and Emergency Action Plan of Bukit Merah Dam. *Civil Engineering and Architecture*, 9(5A), 138–144. <https://doi.org/10.13189/cea.2021.091316>
- Davies, W. E., Bailey, J. F., & Kelly, D. B. (1972). *West Virginia's Buffalo Creek flood: A study of the hydrology and engineering geology (USGS Circular 667)*.
- Dawson, R. J., Peppe, R., & Wang, M. (2011). An agent-based model for risk-based flood incident management. *Natural Hazards*, 59(1), 167–189. <https://doi.org/10.1007/s11069-011-9745-4>
- De Paiva, C. A., Barella, C. F., & Fonseca, A. (2024). Assessing and managing safety risks to downstream communities (in hindsight): What went wrong in the licensing and impact assessment procedures of Brazil's deadliest dam breaks? *Environmental Impact Assessment Review*, 106, 107536. <https://doi.org/10.1016/j.eiar.2024.107536>
- Delaney, K. B., & Evans, S. G. (2015). The 2000 Yigong landslide (Tibetan Plateau), rockslide-dammed lake and outburst flood: Review, remote sensing analysis, and process modelling. *Geomorphology*, 246, 377–393. <https://doi.org/10.1016/j.geomorph.2015.06.020>
- Demiray, B. Z., Sermet, Y., Yildirim, E., & Demir, I. (2025). FloodGame: An interactive 3D serious game on flood mitigation for disaster awareness and education. *Environmental Modelling & Software*, 188, 106418. <https://doi.org/10.1016/j.envsoft.2025.106418>

- Derdous, O., Djemili, L., Bouchehed, H., & Tachi, S. E. (2015). A GIS based approach for the prediction of the dam break flood hazard – A case study of Zardezas reservoir “Skikda, Algeria.” *Journal of Water and Land Development*, 27(1), 15–20. <https://doi.org/10.1515/jwld-2015-0020>
- Di Baldassarre, G., Mazzoleni, M., & Rusca, M. (2021). The legacy of large dams in the United States. *Ambio*, 50(10), 1798–1808. <https://doi.org/10.1007/s13280-021-01533-x>
- Dias, C., Rahman, N. A., & Zaiter, A. (2021). Evacuation under flooded conditions: Experimental investigation of the influence of water depth on walking behaviors. *International Journal of Disaster Risk Reduction*, 58. <https://doi.org/10.1016/j.ijdr.2021.102192>
- Djonko-Moore, C. M., Leonard, J., Holifield, Q., Bailey, E. B., & Almughyirah, S. M. (2018). Using Culturally Relevant Experiential Education to Enhance Urban Children’s Knowledge and Engagement in Science. *Journal of Experiential Education*, 41(2), 137–153. <https://doi.org/10.1177/1053825917742164>
- Dolman, D. I., Brown, I. F., Anderson, L. O., Warner, J. F., Marchezini, V., & Santos, G. L. P. (2018). Re-thinking socio-economic impact assessments of disasters: The 2015 flood in Rio Branco, Brazilian Amazon. *International Journal of Disaster Risk Reduction*, 31, 212–219. <https://doi.org/10.1016/j.ijdr.2018.04.024>
- Dong, K., Yang, D., Sheng, J., Zhang, W., & Jing, P. (2024). Dynamic planning method of evacuation route in dam-break flood scenario based on the ACO-GA hybrid algorithm. *International Journal of Disaster Risk Reduction*, 100, 104219. <https://doi.org/10.1016/j.ijdr.2023.104219>
- Dörner, R., Göbel, S., Effelsberg, W., & Wiemeyer, J. (2016). *Serious Games* (R. Dörner, S. Göbel, W. Effelsberg, & J. Wiemeyer, Eds.). Springer International Publishing. <https://doi.org/10.1007/978-3-319-40612-1>
- dos Santos Vergilio, C., Lacerda, D., da Silva Souza, T., de Oliveira, B. C. V., Fioresi, V. S., de Souza, V. V., da Rocha Rodrigues, G., de Araujo Moreira Barbosa, M. K., Sartori, E., Rangel, T. P., de Almeida, D. Q. R., de Almeida, M. G., Thompson, F., & de Rezende, C. E. (2021). Immediate and long-term impacts of one of the worst mining tailing dam failure worldwide (Bento Rodrigues, Minas Gerais, Brazil). *Science of The Total Environment*, 756, 143697. <https://doi.org/10.1016/j.scitotenv.2020.143697>
- Duke, R. D. (2011). Origin and Evolution of Policy Simulation: A Personal Journey. *Simulation & Gaming*, 42(3), 342–358. <https://doi.org/10.1177/1046878110367570>
- Egilmez, G., & Gedik, R. (2018). *A Gamification Approach for Experiential Education of Inventory Control*. <https://peer.asee.org/29684>
- Elfil, M., & Negida, A. (2017). Sampling methods in Clinical Research; an Educational Review. *Emergency*, 5(1), 52. <https://doi.org/10.1136/eb-2014>

- Ellingwood, B., Corotis, R. B., Boland, J., & Jones, N. P. (1993). Assessing Cost of Dam Failure. *Journal of Water Resources Planning and Management*, 119(1), 64–82. [https://doi.org/10.1061/\(ASCE\)0733-9496\(1993\)119:1\(64\)](https://doi.org/10.1061/(ASCE)0733-9496(1993)119:1(64))
- Farooq, R. (2022). A review of knowledge management research in the past three decades: a bibliometric analysis. *VINE Journal of Information and Knowledge Management Systems*.
- Federal Emergency Management Agency (FEMA). (2013). *Federal Guidelines for Dam Safety: Hazard Potential Classification System for Dams*.
- Ferrari, A., Vacondio, R., & Mignosa, P. (2023). High-resolution 2D shallow water modelling of dam failure floods for emergency action plans. *Journal of Hydrology*, 618, 129192. <https://doi.org/10.1016/j.jhydrol.2023.129192>
- Figueroa-Medina, A. M., Valdés-Díaz, D., Colucci-Ríos, B., Cardona-Rodríguez, N., & Chamorro-Parejo, A. (2023). Analysis of walking speeds and success rates on mid-block crossings using virtual reality simulation. *Accident Analysis & Prevention*, 183, 106987. <https://doi.org/10.1016/j.aap.2023.106987>
- Flood, S., Cradock-Henry, N. A., Blackett, P., & Edwards, P. (2018). Adaptive and interactive climate futures: systematic review of ‘serious games’ for engagement and decision-making. *Environmental Research Letters*, 13(6), 063005. <https://doi.org/10.1088/1748-9326/aac1c6>
- Forrest, S. A., Kubíková, M., & Macháč, J. (2022). Serious gaming in flood risk management. *WIREs Water*, 9(4). <https://doi.org/10.1002/wat2.1589>
- Frandsen, T. F., Bruun Nielsen, M. F., Lindhardt, C. L., & Eriksen, M. B. (2020). Using the full PICO model as a search tool for systematic reviews resulted in lower recall for some PICO elements. *Journal of Clinical Epidemiology*, 127, 69–75. <https://doi.org/10.1016/j.jclinepi.2020.07.005>
- Frankenberg, E., Sikoki, B., Sumantri, C., Suriastini, W., & Thomas, D. (2013). Education, Vulnerability, and Resilience after a Natural Disaster. *Ecology and Society*, 18(2), art16. <https://doi.org/10.5751/ES-05377-180216>
- Ge, W., Sun, H., Jing, L., Li, Z., Li, Y., Cao, B., Wang, T., Jiao, Y., Zhang, H., Wang, J., & van Gelder, P. (2024). Economic life evaluation of reservoir dams based on comprehensive costs and benefits analysis considering potential dam breach: A case study of the Luhun reservoir in China. *Journal of Hydrology*, 639, 131613. <https://doi.org/10.1016/j.jhydrol.2024.131613>
- Ge, W., Wang, X., Li, Z., Zhang, H., Guo, X., Wang, T., Gao, W., Lin, C., & van Gelder, P. (2021). Interval Analysis of the Loss of Life Caused by Dam Failure. *Journal of Water Resources Planning and Management*, 147(1). [https://doi.org/10.1061/\(asce\)wr.1943-5452.0001311](https://doi.org/10.1061/(asce)wr.1943-5452.0001311)
- Gee, J. P. (2007). *What video games have to teach us about learning and literacy* (2nd ed.). Palgrave Macmillan.

- Ghazali, A., Thiruchelvam, S., Sabri Muda, R., Nasharuddin Mustapha, K., Kamal Kadir, A., Faiqa Norkhairi, F., Yahya, N., Hakimie, H., Aziz Mat Isa, A., Fadhli Mamat, A., Hasini, H., Salleh Mohamed Sahari, K., Che Muda, Z., & Yu Jin, N. (2018). Development of Community-Based Early Warning System (CBEWS) in Enhancing Community Preparedness for Dam-Related Disasters in Malaysia. In *ASM Sci. J* (Vol. 11, Issue 2).
- Gill, P., & Baillie, J. (2018). Interviews and focus groups in qualitative research: an update for the digital age. *British Dental Journal*, 225(7), 668–672. <https://doi.org/10.1038/sj.bdj.2018.815>
- Gomes, M. N., Castro, M. de A. R. A., Silva, P. G. C. da, Giacomoni, M. H., & Mendiondo, E. M. (2024). Increasing flood awareness through dam-break serious games. *International Journal of Disaster Risk Reduction*, 108, 104543. <https://doi.org/10.1016/j.ijdr.2024.104543>
- Gopinath, V. (2022). *Components of dam – 12 dam components explained*. Dams, Hydraulics. <https://vincivilworld.com/2022/10/17/components-of-dam-functions/>
- Gu, H., Fu, X., Zhu, Y., Chen, Y., & Huang, L. (2020). Analysis of Social and Environmental Impact of Earth-Rock Dam Breaks Based on a Fuzzy Comprehensive Evaluation Method. *Sustainability*, 12(15), 6239. <https://doi.org/10.3390/su12156239>
- Guimarães, R. N., Moreira, V. R., Cruz, J. R. A., Saliba, A. P. M., & Amaral, M. C. S. (2022). History of tailings dam failure: Impacts on access to safe water and influence on the legislative framework. *Science of The Total Environment*, 852, 158536. <https://doi.org/10.1016/j.scitotenv.2022.158536>
- Gustafsson, J. (2017). *Single case studies vs. multiple case studies: A comparative study*.
- Haddad, E. A., & Teixeira, E. (2015). Economic impacts of natural disasters in megacities: The case of floods in São Paulo, Brazil. *Habitat International*, 45, 106–113. <https://doi.org/10.1016/j.habitatint.2014.06.023>
- He, G., Chai, J., Qin, Y., Xu, Z., & Li, S. (2020). Evaluation of Dam Break Social Impact Assessments Based on an Improved Variable Fuzzy Set Model. *Water*, 12(4), 970. <https://doi.org/10.3390/w12040970>
- He, Q., Wang, G., Luo, L., Shi, Q., Xie, J., & Meng, X. (2017). Mapping the managerial areas of Building Information Modeling (BIM) using scientometric analysis. *International Journal of Project Management*, 35(4), 670–685. <https://doi.org/10.1016/j.ijproman.2016.08.001>
- Helbing, D., Farkas, I., & Vicsek, T. (2000). Simulating dynamical features of escape panic. *Nature*, 407(6803), 487–490. <https://doi.org/10.1038/35035023>
- Hoogendoorn, S. P., & Bovy, P. H. L. (2004). Pedestrian route-choice and activity scheduling theory and models. *Transportation Research Part B: Methodological*, 38(2), 169–190. [https://doi.org/10.1016/S0191-2615\(03\)00007-9](https://doi.org/10.1016/S0191-2615(03)00007-9)

- Hossain, M. K., & Meng, Q. (2020). A thematic mapping method to assess and analyze potential urban hazards and risks caused by flooding. *Computers, Environment and Urban Systems*, 79, 101417. <https://doi.org/10.1016/j.compenvurbsys.2019.101417>
- Hosseini, M.-S., Jahanshahlou, F., Akbarzadeh, M. A., Zarei, M., & Vaez-Gharamaleki, Y. (2024). Formulating research questions for evidence-based studies. *Journal of Medicine, Surgery, and Public Health*, 2, 100046. <https://doi.org/10.1016/j.glmedi.2023.100046>
- Independent Forensic Team. (2018). *Independent Forensic Team Report: Oroville Dam Spillway Incident*.
- International Commission on Large Dams (ICOLD). (1995). *Dam failures statistical analysis*.
- Johnson, V. A., Ronan, K. R., Johnston, D. M., & Peace, R. (2014). Evaluations of disaster education programs for children: A methodological review. *International Journal of Disaster Risk Reduction*, 9, 107–123. <https://doi.org/10.1016/j.ijdrr.2014.04.001>
- Jonkman, S. N., & Penning-Rowsell, E. (2008). Human Instability in Flood Flows. *JAWRA Journal of the American Water Resources Association*, 44(5), 1208–1218. <https://doi.org/10.1111/j.1752-1688.2008.00217.x>
- Joshi, M. M., & Shahapure, S. S. (2017). Two Dimensional Dam Break Flow Study Using HEC-RAS for Ujjani Dam. *International Journal of Engineering and Technology*, 9(4), 2923–2928. <https://doi.org/10.21817/ijet/2017/v9i4/170904032>
- Junjie, M., & Yingxin, M. (2022). The discussions of positivism and interpretivism. *Global Academic Journal of Humanities and Social Sciences*, 4(1), 10–14. <https://doi.org/10.36348/gajhss.2022.v04i01.002>
- Kagioglou, M., Cooper, R., Aouad, G., Sexton, M., Hinks, J., & Sheath, D. (1998). Cross-industry learning: the development of a generic design and construction process based on stage/gate new product development processes found in the manufacturing industry. *Engineering Design Conference*, 595–602.
- Kaman, Z. K., Khanm, T., Mokhtar, S. Bt., Samsuddin, S. A., & Ali, Z. (2024). Factors Influencing Community Participation in Dam Failure Flood Risk Management: Challenges and Recommendations. *International Journal for Disaster and Development Interface*, 4(2), 140–161. <https://doi.org/10.53824/ijddi.v4i2.86>
- Kaneko, R., Salman Al Farisi, M., Miwa, K., Yamada, S., & Kuri, M. (2018). *Evaluation of the Disaster Mitigation Action Card Game for international students in Japan*. <https://www.researchgate.net/publication/325263426>
- Karim, I. R., Hassan, Z. F., Abdullah, H. H., & Alwan, I. A. (2021). 2D-HEC-RAS Modeling of Flood Wave Propagation in a Semi-Arid Area Due to Dam Overtopping Failure. *Civil Engineering Journal*, 7(9), 1501–1514. <https://doi.org/10.28991/cej-2021-03091739>
- Kaushik, V., & Walsh, C. A. (2019). Pragmatism as a research paradigm and its implications for social work research. *Social Sciences*, 8(9), 255. <https://doi.org/10.3390/socsci8090255>

- Khatri, K. K. (2020). Research paradigm: A philosophy of educational research. *International Journal of English Literature and Social Sciences*, 5(5), 1435–1440. <https://doi.org/10.22161/ijels.55.15>
- Khosravi, K., Rostaminejad, M., Cooper, J. R., Mao, L., & Melesse, A. M. (2019). Dam break analysis and flood inundation mapping: The case study of Sefid-Roud Dam, Iran. In *Extreme Hydrology and Climate Variability* (pp. 395–405). Elsevier. <https://doi.org/10.1016/B978-0-12-815998-9.00031-2>
- Kolb, D. A. (1984). *Experiential Learning: Experience As The Source Of Learning And Development Executive skills of Family Medicine Faculty View project How You Learn Is How You Live View project*. <http://www.learningfromexperience.com/images/uploads/process-of-experiential-learning.pdf>
- Kraiger, K., Ford, J. K., & Salas, E. (1993). Application of cognitive, skill-based, and affective theories of learning outcomes to new methods of training evaluation. *Journal of Applied Psychology*, 78(2), 311–328. <https://doi.org/10.1037/0021-9010.78.2.311>
- Kulatunga, K. J., Amaratunga, D., & Haigh, R. (2014). Researching construction client and innovation: methodological perspective. *7th International Postgraduate Conference in the Built and Human Environment*.
- Kumar, S., Jaswal, A., Pandey, A., & Sharma, N. (2017). Literature Review of Dam Break Studies and Inundation Mapping Using Hydraulic Models and GIS. *International Research Journal of Engineering and Technology (IRJET)*, 4(5), 55–61.
- Kumar, S., Kar, A. K., & Ilavarasan, P. V. (2021). Applications of text mining in services management: A systematic literature review. *International Journal of Information Management Data Insights*, 1(1), 100008. <https://doi.org/10.1016/j.jjime.2021.100008>
- Lassa, J., Petal, M., & Surjan, A. (2023). Understanding the impacts of floods on learning quality, school facilities, and educational recovery in Indonesia. *Disasters*, 47(2), 412–436. <https://doi.org/10.1111/disa.12543>
- Latrubesse, E. M., Park, E., Sieh, K., Dang, T., Lin, Y. N., & Yun, S.-H. (2020). Dam failure and a catastrophic flood in the Mekong basin (Bolaven Plateau), southern Laos, 2018. *Geomorphology*, 362, 107221. <https://doi.org/10.1016/j.geomorph.2020.107221>
- Lee, J. Y., Park, D. H., Kim, S.-J., & Kim, T.-W. (2017). Estimation of Break Outflow from the Goeyeon Reservoir Using DAMBRK Model. *Journal of The Korean Society of Civil Engineers*, 37(2), 459–466. <https://doi.org/10.12652/Ksce.2017.37.2.0459>
- Liang, L., Liu, Q., & Li, M. (2017). *Dam-Break Risk Assessment Model of Tailings Reservoir Based on Variable Weight Synthesis and Analytic Hierarchy Process*. 38, 1790.
- Lin, W., Sun, Y., Nijhuis, S., & Wang, Z. (2020). Scenario-based flood risk assessment for urbanizing deltas using future land-use simulation (FLUS): Guangzhou Metropolitan Area as a case study. *Science of The Total Environment*, 739, 139899. <https://doi.org/10.1016/j.scitotenv.2020.139899>

- Lindell, M. K., & Perry, R. W. (2012). The Protective Action Decision Model: Theoretical Modifications and Additional Evidence. *Risk Analysis*, 32(4), 616–632. <https://doi.org/10.1111/j.1539-6924.2011.01647.x>
- Lindell, M. K., & Prater, C. S. (2007). Critical Behavioral Assumptions in Evacuation Time Estimate Analysis for Private Vehicles: Examples from Hurricane Research and Planning. *Journal of Urban Planning and Development*, 133(1), 18–29. [https://doi.org/10.1061/\(ASCE\)0733-9488\(2007\)133:1\(18\)](https://doi.org/10.1061/(ASCE)0733-9488(2007)133:1(18))
- Lorenzoni, N., Stühlinger, V., Stummer, H., & Raich, M. (2020). Long-Term Impact of Disasters on the Public Health System: A Multi-Case Analysis. *International Journal of Environmental Research and Public Health*, 17(17), 6251. <https://doi.org/10.3390/ijerph17176251>
- Lumbroso, D., Davison, M., & Wetton, M. (2023). Development of an agent-based model to improve emergency planning for floods and dam failures. *Journal of Hydroinformatics*, 25(5), 1610–1628. <https://doi.org/10.2166/hydro.2023.194>
- Lyu, Z., Chai, J., Xu, Z., Qin, Y., & Cao, J. (2019). A Comprehensive Review on Reasons for Tailings Dam Failures Based on Case History. *Advances in Civil Engineering*, 2019(1). <https://doi.org/10.1155/2019/4159306>
- Mahamood, R., Kankanamge, N., Kovida De Silva, C., Ranasinghe, D., & Kangana, N. (2024). *Levelling Up Disaster Education: How Gamified Apps Empower Children and Youth—A Systematic Review*. <https://doi.org/10.2139/ssrn.4969758>
- Manzoor, Z., Ehsan, M., Khan, M. B., Manzoor, A., Akhter, M. M., Sohail, M. T., Hussain, A., Shafi, A., Abu-Alam, T., & Abioui, M. (2022). Floods and flood management and its socio-economic impact on Pakistan: A review of the empirical literature. *Frontiers in Environmental Science*, 10. <https://doi.org/10.3389/fenvs.2022.1021862>
- Mauney, L. (2025). *Early Warning Systems can provide real-time information on the health of a dam, conditions during incidents, and advanced warning to evacuate ahead of dam failure flooding*. ASDSO Lessons Learned Main Navigation. <https://damfailures.org/lessons-learned/early-warning-systems>
- Mayer, I. S. (2009). The Gaming of Policy and the Politics of Gaming: A Review. *Simulation & Gaming*, 40(6), 825–862. <https://doi.org/10.1177/1046878109346456>
- McQuitty, S. (2018). The Purposes of multivariate data analysis methods: An applied commentary. *Journal of African Business*, 19(1), 124–142. <https://doi.org/10.1080/15228916.2017.1374816>
- Mehrad, A., & Zangeneh, M. T. (2019). Comparison between qualitative and quantitative research approaches: Social sciences. *International Journal For Research In Educational Studies*, 5(7). <https://orcid.org/0000-0003-4364-5709>
- Mehta, A. M., Weeks, C. S., & Tyquin, E. (2020). Towards preparedness for dam failure: An evidence base for risk communication for downstream communities. *International*

- Journal of Disaster Risk Reduction*, 50, 101820.
<https://doi.org/10.1016/j.ijdr.2020.101820>
- Mezmir, E. (2020). Qualitative data analysis: An overview of data reduction, data display and interpretation. *Research on Humanities and Social Sciences*.
<https://doi.org/10.7176/rhss/10-21-02>
- Monte, B., Costa, D., Chaves, M., Magalhães, L., & Uvo, C. (2016). Hydrological and hydraulic modelling applied to the mapping of flood-prone areas. *Revista Brasileira de Recursos Hídricos*, 21(1), 152–167. <https://doi.org/10.21168/rbrh.v21n1.p152-167>
- Morris, M. D. (1991). Factorial Sampling Plans for Preliminary Computational Experiments. *Technometrics*, 33(2), 161–174. <https://doi.org/10.1080/00401706.1991.10484804>
- Mossoux, S., Delcamp, A., Poppe, S., Michellier, C., Canters, F., & Kervyn, M. (2016). Hazagora: Will you survive the next disaster? – A serious game to raise awareness about geohazards and disaster risk reduction. *Natural Hazards and Earth System Sciences*, 16(1), 135–147. <https://doi.org/10.5194/nhess-16-135-2016>
- Mubialiwo, A., Abebe, A., Kawo, N. S., Ekelu, J., Nadarajah, S., & Onyutha, C. (2022). Hydrodynamic Modelling of Floods and Estimating Socio-economic Impacts of Floods in Ugandan River Malaba Sub-catchment. *Earth Systems and Environment*, 6(1), 45–67. <https://doi.org/10.1007/s41748-021-00283-w>
- Muda, R. S., Md Amin, M. F., Mohd Khidzir, A. B., Tukiman, I., & Mohd. Hussain, M. R. (2021). Knowledge Transfer in People-Centered Dam-Related Disaster Program in Cameron Highlands. *Journal of Advanced Research in Applied Sciences and Engineering Technology*, 24(1), 37–46. <https://doi.org/10.37934/araset.24.1.3746>
- Muda, R. S., Tukiman, I., Md Amin, M. F., Mohd. Hussain, Mohd. R., & Mohd Khidzir, A. B. (2020). Dam related disaster framework for emergency preparedness. *PLANNING MALAYSIA*, 18. <https://doi.org/10.21837/pm.v18i14.837>
- Mukherjee, M. (2017). A review of research design. *INTERNATIONAL JOURNAL OF ADVANCED ENGINEERING AND MANAGEMENT*, 2(3), 56. <https://doi.org/10.24999/IJOAEM/02030016>
- Nguyen, H. D., Nguyen, Q.-H., Dang, D. K., Van, C. P., Truong, Q. H., Pham, S. D., Bui, Q.-T., & Petrisor, A.-I. (2024). A novel flood risk management approach based on future climate and land use change scenarios. *Science of The Total Environment*, 921, 171204. <https://doi.org/10.1016/j.scitotenv.2024.171204>
- Nielsen, D., Spiryagin, M., & Cole, C. (2019). Model to estimate infrastructure damage costs for different train types. *Australian Journal of Mechanical Engineering*, 17(3), 219–231. <https://doi.org/10.1080/14484846.2017.1359896>
- Novak, J., Lozos, J. C., & Spear, S. E. (2019). Development of an Interactive Escape Room Intervention to Educate College Students about Earthquake Preparedness. *Natural Hazards Review*, 20(1). [https://doi.org/10.1061/\(ASCE\)NH.1527-6996.0000322](https://doi.org/10.1061/(ASCE)NH.1527-6996.0000322)

- O'Connell, P. E., & O'Donnell, G. (2014). Towards modelling flood protection investment as a coupled human and natural system. *Hydrology and Earth System Sciences*, 18(1), 155–171. <https://doi.org/10.5194/hess-18-155-2014>
- Oktari, R. S., Shiwaku, K., Munadi, K., Syamsidik, & Shaw, R. (2015). A conceptual model of a school–community collaborative network in enhancing coastal community resilience in Banda Aceh, Indonesia. *International Journal of Disaster Risk Reduction*, 12, 300–310. <https://doi.org/10.1016/j.ijdr.2015.02.006>
- Oladinrin, O. T., Arif, M., Rana, M. Q., & Gyoh, L. (2023). Interrelations between construction ethics and innovation: a bibliometric analysis using VOSviewer. *Construction Innovation*, 23(3), 505–523.
- Omotayo, T., & Kulatunga, U. (2015). The research methodology for the development of a kaizen costing framework suitable for indigenous construction firms in Lagos, Nigeria. *Proceedings of ARCOM Doctoral Workshop Research Methodology*, 1–12.
- Pa, P., & Sin, S. (2020). Modeling Approach for Earthen Dam Breach Analysis in North Yamar Dam, Myanmar. *American Scientific Research Journal for Engineering, Technology, and Sciences (ASRJETS)*, 69(1), 59–72.
- Pahlevan-Sharif, S., Mura, P., & Wijesinghe, S. N. R. (2019). A systematic review of systematic reviews in tourism. *Journal of Hospitality and Tourism Management*, 39, 158–165. <https://doi.org/10.1016/j.jhtm.2019.04.001>
- Palmatier, R. W., Houston, M. B., & Hulland, J. (2018). Review articles: purpose, process, and structure. *Journal of the Academy of Marketing Science*, 46(1), 1–5. <https://doi.org/10.1007/s11747-017-0563-4>
- Parente, C. E. T., Lino, A. S., Carvalho, G. O., Pizzochero, A. C., Azevedo-Silva, C. E., Freitas, M. O., Teixeira, C., Moura, R. L., Ferreira Filho, V. J. M., & Malm, O. (2021). First year after the Brumadinho tailings' dam collapse: Spatial and seasonal variation of trace elements in sediments, fishes and macrophytes from the Paraopeba River, Brazil. *Environmental Research*, 193, 110526. <https://doi.org/10.1016/j.envres.2020.110526>
- Park, Y. S., Konge, L., & Artino, A. R. (2020). The Positivism paradigm of research. *Academic Medicine*, 95(5), 690–694. <https://doi.org/10.1097/ACM.0000000000003093>
- Paronuzzi, P., Bolla, A., Pinto, D., Lenaz, D., & Soccac, M. (2021). The clays involved in the 1963 Vajont landslide: Genesis and geomechanical implications. *Engineering Geology*, 294, 106376. <https://doi.org/10.1016/j.enggeo.2021.106376>
- Passey, M., Papp, B., Zielinski, A., & Eng, P. (2014). *DAM SAFETY MANAGEMENT PLANS: A CONCEPTUAL FRAMEWORK FOR RISK-INFORMED DECISION MAKING IN ONTARIO*. <https://doi.org/10.13140/2.1.4084.6726>
- Pathak, S., Liu, M., Jato-Espino, D., & Zevenbergen, C. (2020). Social, economic and environmental assessment of urban sub-catchment flood risks using a multi-criteria approach: A case study in Mumbai City, India. *Journal of Hydrology*, 591, 125216. <https://doi.org/10.1016/j.jhydrol.2020.125216>

- Pel, A. J., Bliemer, M. C. J., & Hoogendoorn, S. P. (2012). A review on travel behaviour modelling in dynamic traffic simulation models for evacuations. *Transportation*, 39(1), 97–123. <https://doi.org/10.1007/s11116-011-9320-6>
- Pellicani, R., Parisi, A., Iemmolo, G., & Apollonio, C. (2018). Economic Risk Evaluation in Urban Flooding and Instability-Prone Areas: The Case Study of San Giovanni Rotondo (Southern Italy). *Geosciences*, 8(4), 112. <https://doi.org/10.3390/geosciences8040112>
- Peramuna, P. D. P. O., Neluwala, N. G. P. B., Wijesundara, K. K., DeSilva, S., Venkatesan, S., & Dissanayake, P. B. R. (2024). Review on model development techniques for dam break flood wave propagation. *WIREs Water*, 11(2). <https://doi.org/10.1002/wat2.1688>
- Perera, C., Jayasooriya, D., Jayasiri, G., Randil, C., Bandara, C., Siriwardana, C., Dissanayake, R., Hippola, S., Sylva, K., Kamalrathne, T., & Kulatunga, A. (2020). Evaluation of gaps in early warning mechanisms and evacuation procedures for coastal communities in Sri Lanka. *International Journal of Disaster Resilience in the Built Environment*, 11(3), 415–433. <https://doi.org/10.1108/IJDRBE-07-2019-0048>
- Perera, D., Agnihotri, J., Seidou, O., & Djalante, R. (2020). Identifying societal challenges in flood early warning systems. *International Journal of Disaster Risk Reduction*, 51, 101794. <https://doi.org/10.1016/j.ijdr.2020.101794>
- Perera, D., & North, T. (2021). The Socio-Economic Impacts of Aged-Dam Removal: A Review. *Journal of Geoscience and Environment Protection*, 09(10), 62–78. <https://doi.org/10.4236/gep.2021.910005>
- Pérez-Brito, C. T. (2018). Addressing Social Impacts of Urban Rail Projects. In *The Urban Rail Development Handbook* (pp. 523–558). The World Bank. https://doi.org/10.1596/978-1-4648-1272-9_ch14
- Perry, R. W., & Lindell, M. K. (2003). Preparedness for Emergency Response: Guidelines for the Emergency Planning Process. *Disasters*, 27(4), 336–350. <https://doi.org/10.1111/j.0361-3666.2003.00237.x>
- Persson, E., & Granberg, M. (2021). Implementation through collaborative crisis management and contingency planning: the case of dam failure in Sweden. *Journal of Risk Research*, 24(10), 1335–1348. <https://doi.org/10.1080/13669877.2020.1863845>
- Petty, N. J., Thomson, O. P., & Stew, G. (2012). Ready for a paradigm shift? Part 1: Introducing the philosophy of qualitative research. *Manual Therapy*, 17(4), 267–274. <https://doi.org/10.1016/j.math.2012.03.006>
- Pfändler, P., Keßler, S., Huber, M., & Angst, U. (2024). Spatial variability of half-cell potential data from a reinforced concrete structure—a geostatistical analysis. *Structure and Infrastructure Engineering*, 20(11), 1698–1713. <https://doi.org/10.1080/15732479.2022.2158204>
- Phyo, A. P., Yabar, H., & Richards, D. (2023). Managing dam breach and flood inundation by HEC-RAS modeling and GIS mapping for disaster risk management. *Case Studies in*

- Chemical and Environmental Engineering*, 8, 100487.
<https://doi.org/10.1016/j.cscee.2023.100487>
- Pilotti, M., Maranzoni, A., Milanesi, L., Tomirotti, M., & Valerio, G. (2014). Dam-break modeling in alpine valleys. *Journal of Mountain Science*, 11(6), 1429–1441.
<https://doi.org/10.1007/s11629-014-3042-0>
- Pilotti, M., Milanesi, L., Bacchi, V., Tomirotti, M., & Maranzoni, A. (2020). Dam-Break Wave Propagation in Alpine Valley with HEC-RAS 2D: Experimental Cancano Test Case. *Journal of Hydraulic Engineering*, 146(6). [https://doi.org/10.1061/\(ASCE\)HY.1943-7900.0001779](https://doi.org/10.1061/(ASCE)HY.1943-7900.0001779)
- Pollock, A., & Berge, E. (2018). How to do a systematic review. *International Journal of Stroke*, 13(2), 138–156. <https://doi.org/10.1177/1747493017743796>
- Quirogaa, V. M., Kurea, S., Udoa, K., & Manoa, A. (2016). Application of 2D numerical simulation for the analysis of the February 2014 Bolivian Amazonia flood: Application of the new HEC-RAS version 5. *Ribagua*, 3(1), 25–33.
<https://doi.org/10.1016/j.riba.2015.12.001>
- Rahi, S. (2017). Research design and methods: A systematic review of research paradigms, sampling issues and instruments development. *International Journal of Economics & Management Sciences*, 06(02). <https://doi.org/10.4172/2162-6359.1000403>
- Rahubadda, R. V. A. D., Dassanayake, S. M., De-silva, M. C. K., Thayaparan, M., & Kulathunga, U. (2024). Simulation of plausible hazard scenarios associated with dam failures: case study on Kantale dam, Sri Lanka. *17th International Research Conference - FARU 2024*, 407–418. <https://doi.org/10.31705/FARU.2024.42>
- Railsback, S. F., & Grimm, V. (2019). *Agent-Based and Individual-Based Modeling: A Practical Introduction* (2nd ed.). Princeton University Press.
- Rana, N., Singhal, J., & Gupta, V. (2013). Kedarnath disaster: Facts and plausible causes. *Current Science*, 105(2), 171–174.
- Reckien, D., & Eisenack, K. (2013). Climate Change Gaming on Board and Screen. *Simulation & Gaming*, 44(2–3), 253–271. <https://doi.org/10.1177/1046878113480867>
- Renz, S. M., Carrington, J. M., & Badger, T. A. (2018). Two strategies for qualitative content analysis: An intra method approach to triangulation. *Qualitative Health Research*, 28(5), 824–831. <https://doi.org/10.1177/1049732317753586>
- Ricci, L., Lanfranchi, J.-B., Lemetayer, F., Rotonda, C., Guillemin, F., Coste, J., & Spitz, E. (2019). Qualitative methods used to generate questionnaire items: A systematic review. *Qualitative Health Research*, 29(1), 149–156.
<https://doi.org/10.1177/1049732318783186>
- Ridder, H.-G. (2017). The theory contribution of case study research designs. *Business Research*, 10(2), 281–305. <https://doi.org/10.1007/s40685-017-0045-z>

- Rijcken, T., Stijnen, J., & Slootjes, N. (2012). “SimDelta”—Inquiry into an Internet-Based Interactive Model for Water Infrastructure Development in The Netherlands. *Water*, 4(2), 295–320. <https://doi.org/10.3390/w4020295>
- Roddam, A. W. (2005). Statistics for the Quality Control Chemistry Laboratory. *Journal of the Royal Statistical Society Series A: Statistics in Society*, 168(2), 464–464. https://doi.org/10.1111/j.1467-985X.2005.358_13.x
- Rogers, J. D. (2006). *Lessons Learned from the St. Francis Dam Failure*. https://scholarsmine.mst.edu/geosci_geo_peteng_facwork
- Ronan, K. R., Johnston, D. M., Daly, M., & Fairley, R. (2001). School children’s risk perceptions and preparedness: a hazards education survey. *Australasian Journal of Disaster and Trauma Studies*, 2001(1). <https://www.massey.ac.nz/~trauma/issues/2001-1/ronan.htm>
- Roulo, D., & Pichuka, S. (2024). Assessing the effects of extreme rainfall patterns and their impact on dam safety: a case study on Indian dam failures. *Natural Hazards*, 120(14), 12967–12987. <https://doi.org/10.1007/s11069-024-06720-z>
- Ruíz-Roso, M. B., de Carvalho Padilha, P., Matilla-Escalante, D. C., Brun, P., Ulloa, N., Acevedo-Correa, D., Arantes Ferreira Peres, W., Martorell, M., Rangel Bousquet Carrilho, T., de Oliveira Cardoso, L., Carrasco-Marín, F., Paternina-Sierra, K., Lopez de las Hazas, M.-C., Rodriguez-Meza, J. E., Villalba-Montero, L. F., Bernabè, G., Pauletto, A., Taci, X., Cárcamo-Regla, R., ... Dávalos, A. (2020). Changes of physical activity and ultra-processed food consumption in adolescents from different countries during COVID-19 Pandemic: An observational study. *Nutrients*, 12(8), 2289. <https://doi.org/10.3390/nu12082289>
- Salajegheh, A., Bakhshaei, M., Chavoshi, S., Keshtkar, A. R., & Najafi Hajivar, M. (2009). *Floodplain mapping using HEC-RAS and GIS in semi-arid regions of Iran*. <http://jdesert.ut.ac.ir>
- Salameh, J.-P., Bossuyt, P. M., McGrath, T. A., Thombs, B. D., Hyde, C. J., Macaskill, P., Deeks, J. J., Leeftang, M., Korevaar, D. A., Whiting, P., Takwoingi, Y., Reitsma, J. B., Cohen, J. F., Frank, R. A., Hunt, H. A., Hooft, L., Rutjes, A. W. S., Willis, B. H., Gatsonis, C., ... McInnes, M. D. F. (2020). Preferred reporting items for systematic review and meta-analysis of diagnostic test accuracy studies (PRISMA-DTA): explanation, elaboration, and checklist. *BMJ*, m2632. <https://doi.org/10.1136/bmj.m2632>
- Saliya, C. A. (2023). Research philosophy. In *Social Research Methodology and Publishing Results: A Guide to Non-Native English Speakers* (pp. 35–51). <https://doi.org/10.4018/978-1-6684-6859-3.ch004>
- Sampson, A., Theresa, A., & Joseph R, O. (2020). Evaluation of the Burden and Intervention Strategies of TB-HIV Co-Infection in West Africa. *Journal of Infectious Diseases and Epidemiology*, 6(4). <https://doi.org/10.23937/2474-3658/1510143>
- Samsuddin, S. A., Karmilla Kaman, Z., Khanm, T., Ali, Z., & Mat, N. (2024). Assessing socio-economic and environmental losses of dam- failure flood risk: a review on sustainable

- framework. *JOURNAL OF SUSTAINABILITY SCIENCE AND MANAGEMENT*, 19(1), 171–195. <https://doi.org/10.46754/jssm.2024.01.014>
- Samsuddin, S., Karmilla kaman, Z., Khanm, T., Ali, Z., & Mat, N. (2024). Assessing socio-economic and environmental losses of dam- failure flood risk: a review on sustainable framework. *Journal of Sustainability Science and Management*, 19(1), 171–195. <https://doi.org/10.46754/jssm.2024.01.014>
- Saunders, M., Lewis, P., & Thornhill, A. (2019). *Research methods for business students* (8th ed.). Pearson Education.
- Schapper, A., & Urban, F. (2021). Large dams, norms and Indigenous Peoples. *Development Policy Review*, 39(S1). <https://doi.org/10.1111/dpr.12467>
- Schoonenboom, J., & Johnson, R. B. (2017). How to construct a mixed methods research design. *KZfSS Kölner Zeitschrift Für Soziologie Und Sozialpsychologie*, 69(S2), 107–131. <https://doi.org/10.1007/s11577-017-0454-1>
- Schrader, C. (2022). Serious Games and Game-Based Learning. In *Handbook of Open, Distance and Digital Education* (pp. 1–14). Springer Singapore. https://doi.org/10.1007/978-981-19-0351-9_74-1
- Scotland, J. (2012). Exploring the philosophical underpinnings of research: Relating ontology and epistemology to the methodology and methods of the scientific, interpretive, and critical research paradigms. *English Language Teaching*, 5(9). <https://doi.org/10.5539/elt.v5n9p9>
- Seddeek, M. (2023). Structural and Non-structural Measures Integration through Multi-hazard Risk Approach - Sohag Governorate as an Example. *SVU-International Journal of Engineering Sciences and Applications*, 4(2), 303–317. <https://doi.org/10.21608/svusrc.2023.222761.1138>
- Shabu, T., & Musa, S. D. (2015). Downstream Socio-Economic Impact of Dam Failure: A Case Study of 2012 River Flooding in Benue State, Nigeria*. *Journal of Environmental Issues and Agriculture in Developing Countries*, 7(3).
- Shahraki, A., Zadbar, A., Motevalli, M., & Aghajani, F. (2012). Modeling of earth dam break with SMPDBK case study: Bidekan earth dam. *World Applied Sciences Journal*, 19(3), 376–386. <https://doi.org/10.5829/idosi.wasj.2012.19.03.1070>
- Shahrim, M. F., & Ros, F. C. (2020). Dam Break Analysis of Temenggong Dam Using HEC-RAS. *IOP Conference Series: Earth and Environmental Science*, 479(1), 012041. <https://doi.org/10.1088/1755-1315/479/1/012041>
- Sharma, G. (2017). *Impact factor: 5.2 IJAR*. 3(7), 749–752. www.allresearchjournal.com
- Shuka, K. A. M., Wang, K., Abubakar, G. A., & Xu, T. (2024). Impact of Structural and Non-Structural Measures on the Risk of Flash Floods in Arid and Semi-Arid Regions: A Case Study of the Gash River, Kassala, Eastern Sudan. *Sustainability*, 16(5), 1752. <https://doi.org/10.3390/su16051752>

- Silva, A. F. R., & Eleutério, J. C. (2023). Effectiveness of a Dam-Breach Flood Alert in Mitigating Life Losses: A Spatiotemporal Sectorisation Analysis in a High-Density Urban Area in Brazil. *Water*, 15(19), 3433. <https://doi.org/10.3390/w15193433>
- Silva Rotta, L. H., Alcântara, E., Park, E., Negri, R. G., Lin, Y. N., Bernardo, N., Mendes, T. S. G., & Souza Filho, C. R. (2020). The 2019 Brumadinho tailings dam collapse: Possible cause and impacts of the worst human and environmental disaster in Brazil. *International Journal of Applied Earth Observation and Geoinformation*, 90, 102119. <https://doi.org/10.1016/j.jag.2020.102119>
- Singh, A. (2021). *Significance of research process in research work*. <https://doi.org/10.13140/RG.2.2.32664.93445/1>
- Singh, V. K., Singh, P., Karmakar, M., Leta, J., & Mayr, P. (2021). The journal coverage of Web of Science, Scopus and Dimensions: A comparative analysis. *Scientometrics*, 126(6), 5113–5142. <https://doi.org/10.1007/s11192-021-03948-5>
- Smith, D. (2024). The social impacts of dams and hydropower. In *Handbook of Social Impact Assessment and Management* (pp. 51–66). Edward Elgar Publishing. <https://doi.org/10.4337/9781802208870.00011>
- Solinska-Nowak, A., Magnuszewski, P., Curl, M., French, A., Keating, A., Mochizuki, J., Liu, W., Mechler, R., Kulakowska, M., & Jarzabek, L. (2018). An overview of serious games for disaster risk management – Prospects and limitations for informing actions to arrest increasing risk. *International Journal of Disaster Risk Reduction*, 31, 1013–1029. <https://doi.org/10.1016/j.ijdr.2018.09.001>
- Sreekumar, U., Gildeh, H. K., Mohammadian, A., Rennie, C., & Nistor, I. (2024). Tailings Dam Breach Outflow Modelling: A Review. *Mine Water and the Environment*, 43(4), 563–587. <https://doi.org/10.1007/s10230-024-01015-y>
- Stuckey, H. (2015). The second step in data analysis: Coding qualitative research data. *Journal of Social Health and Diabetes*, 03(01), 007–010. <https://doi.org/10.4103/2321-0656.140875>
- Sun, M.-C., Sakai, K., Chen, A. Y., & Hsu, Y.-T. (2022). Location problems of vertical evacuation structures for dam-failure floods: Considering shelter-in-place and horizontal evacuation. *International Journal of Disaster Risk Reduction*, 77, 103044. <https://doi.org/10.1016/j.ijdr.2022.103044>
- Taherdoost, H. (2021). Data collection methods and tools for research; a step-by-step guide to choose data collection technique for academic and business research projects. In *International Journal of Academic Research in Management (IJARM)* (Vol. 2021, Issue 1). <https://hal.science/hal-03741847>
- Taherdoost, H. (2022). What are different research approaches? comprehensive review of qualitative, quantitative, and mixed method research, their applications, types, and limitations. *Journal of Management Science & Engineering Research*, 5(1), 53–63. <https://doi.org/10.30564/jmser.v5i1.4538>

- Taillandier, F., Di Maiolo, P., Taillandier, P., Jacquenod, C., Rauscher-Lauranceau, L., & Mehdizadeh, R. (2021). An agent-based model to simulate inhabitants' behavior during a flood event. *International Journal of Disaster Risk Reduction*, 64, 102503. <https://doi.org/10.1016/j.ijdr.2021.102503>
- Tariq, M. A. U. R., Rajabi, Z., & Muttill, N. (2021). An Evaluation of Risk-Based Agricultural Land-Use Adjustments under a Flood Management Strategy in a Floodplain. *Hydrology*, 8(1), 53. <https://doi.org/10.3390/hydrology8010053>
- Tesfatsion, L., Rehmann, C. R., Cardoso, D. S., Jie, Y., & Gutowski, W. J. (2017). An agent-based platform for the study of watersheds as coupled natural and human systems. *Environmental Modelling & Software*, 89, 40–60. <https://doi.org/10.1016/j.envsoft.2016.11.021>
- Tessema, B. H., Gebremedhn, A. Y., & Getahun, Y. S. (2024). Dam breach analysis and flood inundation mapping of Dire Dam, using HEC-HMS and HEC-RAS models. *Sustainable Water Resources Management*, 10(2), 45. <https://doi.org/10.1007/s40899-023-01015-w>
- Tingey-Holyoak, J. L., Pisaniello, J. D., Burritt, R. L., & Spassis, A. (2013). Incorporating on-farm water storage safety into catchment policy frameworks: International best practice policy for private dam safety accountability and assurance. *Land Use Policy*, 33, 61–70. <https://doi.org/10.1016/j.landusepol.2012.12.011>
- Tortajada, C. (2015). Dams: An Essential Component of Development. *Journal of Hydrologic Engineering*, 20(1). [https://doi.org/10.1061/\(ASCE\)HE.1943-5584.0000919](https://doi.org/10.1061/(ASCE)HE.1943-5584.0000919)
- Tsai, M.-H., Chang, Y.-L., Shiau, J.-S., & Wang, S.-M. (2020). Exploring the effects of a serious game-based learning package for disaster prevention education: The case of Battle of Flooding Protection. *International Journal of Disaster Risk Reduction*, 43, 101393. <https://doi.org/10.1016/j.ijdr.2019.101393>
- Tukiman, I., Ramzi, Z., Rahsidi Izawati TNB Sdn Bhd, S. T., Mohd Ramzi Ismawi, M. Z., & Lumpur, K. (2017). Shaping the Future of Hydropower. In *International Journal of Hydropower and Dam*. <https://www.researchgate.net/publication/349988315>
- United Nations Environment Programme (UNEP), Principles for Responsible Investment (PRI), & International Council on Mining and Metals (ICMM). (2020). *Global Industry Standard on Tailings Management*.
- Vallance, S., & Carlton, S. (2015). First to respond, last to leave: Communities' roles and resilience across the '4Rs.' *International Journal of Disaster Risk Reduction*, 14, 27–36. <https://doi.org/10.1016/j.ijdr.2014.10.010>
- Vamvakeridou-Lyroudia, L. S., Chen, A. S., Khoury, M., Gibson, M. J., Kostaridis, A., Stewart, D., Wood, M., Djordjevic, S., & Savic, D. A. (2020). Assessing and visualising hazard impacts to enhance the resilience of Critical Infrastructures to urban flooding. *Science of The Total Environment*, 707, 136078. <https://doi.org/10.1016/j.scitotenv.2019.136078>
- Victoria Department of Environment, L. W. and P. (2015). *Engaging communities on dam safety: A guide for dam owners*.

- https://www.water.vic.gov.au/__data/assets/pdf_file/0036/671949/engaging-communities-on-dam-safety-a-guide-for-dam-owners.pdf
- Vogel, A. (2013). *Failures of Dams – Challenges to the Present and the Future*. 178–185. <https://doi.org/10.2749/222137813807018908>
- Wang, Y., Fu, Z., Cheng, Z., Xiang, Y., Chen, J., Zhang, P., & Yang, X. (2024). Uncertainty analysis of dam-break flood risk consequences under the influence of non-structural measures. *International Journal of Disaster Risk Reduction*, 102, 104265. <https://doi.org/10.1016/j.ijdr.2024.104265>
- Wang, Y., Xiang, Y., Dai, B., & Li, J. (2025). Dam early warning model based on structural anomaly identification and dynamic effect variables selection. *Structures*, 74, 108507. <https://doi.org/10.1016/j.istruc.2025.108507>
- Weerasinghe, L., Thayaparan, M., & Fernando, T. (2022). Functional characteristics of an early warning system to minimise the risks of dam breaks in Sri Lanka. *Proceedings of 10th World Construction Symposium 2022*, 506–518. <https://doi.org/10.31705/WCS.2022.41>
- Whitney, D. J., Lindell, M. K., & Nguyen, H. D. (2004). Earthquake Beliefs and Adoption of Seismic Hazard Adjustments. *Risk Analysis*, 24(1), 87–102. <https://doi.org/10.1111/j.0272-4332.2004.00414.x>
- Wilk-Woźniak, E., Krztoń, W., & Górnik, M. (2021). Synergistic impact of socio-economic and climatic changes on the ecosystem of a deep dam reservoir: Case study of the Dobczyce dam reservoir based on a 30-year monitoring study. *Science of The Total Environment*, 756, 144055. <https://doi.org/10.1016/j.scitotenv.2020.144055>
- Wouters, P., van Nimwegen, C., van Oostendorp, H., & van der Spek, E. D. (2013). A meta-analysis of the cognitive and motivational effects of serious games. *Journal of Educational Psychology*, 105(2), 249–265. <https://doi.org/10.1037/a0031311>
- Wu, M., Ge, W., Li, Z., Wu, Z., Zhang, H., Li, J., & Pan, Y. (2019). Improved Set Pair Analysis and Its Application to Environmental Impact Evaluation of Dam Break. *Water*, 11(4), 821. <https://doi.org/10.3390/w11040821>
- Wu, M., YE, Y., Hu, N., Wang, Q., & Tan, W. (2022). Scientometric analysis on the review research evolution of tailings dam failure disasters. *Environmental Science and Pollution Research*, 30(6), 13945–13959. <https://doi.org/10.1007/s11356-022-24937-y>
- Wu, S., Lei, Y., Yang, S., Cui, P., & Jin, W. (2022). An Agent-Based Approach to Integrate Human Dynamics Into Disaster Risk Management. *Frontiers in Earth Science*, 9. <https://doi.org/10.3389/feart.2021.818913>
- Xie, L., Xu, W., Ding, X., Bürgmann, R., Giri, S., & Liu, X. (2022). A multi-platform, open-source, and quantitative remote sensing framework for dam-related hazard investigation: Insights into the 2020 Sardoba dam collapse. In *International Journal of Applied Earth Observation and Geoinformation* (Vol. 111). Elsevier B.V. <https://doi.org/10.1016/j.jag.2022.102849>

- Xiong, Y. (2011). A Dam Break Analysis Using HEC-RAS. *Journal of Water Resource and Protection*, 03(06), 370–379. <https://doi.org/10.4236/jwarp.2011.36047>
- Yochum, S. E., Goertz, L. A., & Jones, P. H. (2008). Case Study of the Big Bay Dam Failure: Accuracy and Comparison of Breach Predictions. *Journal of Hydraulic Engineering*, 134(9), 1285–1293. [https://doi.org/10.1061/\(ASCE\)0733-9429\(2008\)134:9\(1285\)](https://doi.org/10.1061/(ASCE)0733-9429(2008)134:9(1285))
- Zaharaddeen Kado, S., Ibrahim, R., & Mohamed Khaidzir, K. A. (2014). Agent parameters for building consultant teamwork in the agent-based simulation model development. *2014 International Symposium on Technology Management and Emerging Technologies*, 212–217. <https://doi.org/10.1109/ISTMET.2014.6936508>
- Zhang, J., Yang, X., Fan, G., Li, H., & Zhou, J. (2024). Physical and numerical modeling of a landslide dam breach and flood routing process. *Journal of Hydrology*, 628, 130552. <https://doi.org/10.1016/j.jhydrol.2023.130552>
- Zhang, X., Wang, C.-Y., Wong, H., Jiang, T., & Dong, J. (2022). Modeling dam deformation in the early stage of internal seepage erosion – Application to the Teton Dam, Idaho, before the 1976 incident. *Journal of Hydrology*, 605, 127378. <https://doi.org/10.1016/j.jhydrol.2021.127378>
- Zhong, B., Wu, H., Li, H., Sepasgozar, S., Luo, H., & He, L. (2019). A scientometric analysis and critical review of construction related ontology research. *Automation in Construction*, 101, 17–31. <https://doi.org/10.1016/j.autcon.2018.12.013>
- Zhuo, L., & Han, D. (2020). Agent-based modelling and flood risk management: A compendious literature review. *Journal of Hydrology*, 591, 125600. <https://doi.org/10.1016/j.jhydrol.2020.125600>
- Zio, E., & Duffey, R. B. (2021). The risk of the electrical power grid due to natural hazards and recovery challenge following disasters and record floods: What next? In *Climate Change and Extreme Events* (pp. 215–238). Elsevier. <https://doi.org/10.1016/B978-0-12-822700-8.00008-1>
- Žukauskas, P., Vveinhardt, J., & Andriukaitienė, R. (2018). Philosophy and Paradigm of Scientific Research. In *Management Culture and Corporate Social Responsibility*. InTech. <https://doi.org/10.5772/intechopen.70628>