

DAFTAR PUSTAKA

- Adri, W., Sabri, L. M., & Wahyuddin, Y. (2021). Pembuatan Peta Jalur Evakuasi Bencana Gunung Api Dan Persebaran Lokasi Shelter Menggunakan Metode Network Analyst (Studi Kasus : Gunung Merapi, Boyolali-Magelang). *Jurnal Geodesi Undip*, 10(1), 189–196.
- Afik, A., Khoriyati, A., & Pratama, I. Y. (2021). Tingkat Kesiapsiagaan Masyarakat Dibidang Kesehatan Dalam Menghadapi Dampak Erupsi Gunung Berapi. *Jurnal Kesehatan Mesencephalon*, 7(1), 1–10. <https://doi.org/10.36053/mesencephalon.v7i1.260>
- Agina Putra, & Yuwono, P. (2017). Faktor-Faktor Yang Mempengaruhi Tingkat Pengetahuan Masyarakat dalam Mitigasi Bencana Alam Tanah Longsor. *University Research Colloquium*, 305–314.
- Ahmad, S. L., Ahsan, A., & Fathoni, M. (2018). Factor Analysis Related To Family Preparedness Facing Disaster Impact in Ternate City of Maluku Utara Province. *Journal of Nursing Science*, 6(1), 108–123. [https://doi.org/10.21776/ub.jurnalilmukeperawatan\(journalofnursingscience\).2018.006.01.11](https://doi.org/10.21776/ub.jurnalilmukeperawatan(journalofnursingscience).2018.006.01.11)
- Ajinder, W., & Karpoora, S. (2024). *Gender and Climate Sensitive Disaster Risk Management*. Springer.
- Alviyansyah, N., Prayitno, H., & Firmansyah, H. (2021). Pengaruh Pendidikan Kesehatan Kesiapsiagaan Bencana Banjir Terhadap Pengetahuan Karang Taruna Desa Girimukti Kecamatan Sindangbarang Cianjur. *Jurnal Kesehatan Kartika*, 16(3), 75–80.
- Alya, A. A. D., Mona, D., Dwi, J. S. G., & Lim, A. K. (2024). The difference between digital educational game and powerpoint-based video on oral hygiene knowledge in children aged 7-8 years : a quasi-experimental. *Padjadjaran Journal of Dentistry*, 36(2), 241–249. <https://doi.org/10.24198/pjd.vol>
- Amelia, R., Amrullah, J. F., & Puspitasari, P. (2024). *Hubungan Pendidikan Dan Kegiatan Simulasi Bencana Dengan Pengetahuan Kesiapsiagaan Bencana Gempa Bumi Di Rsup Dr Hasan Sadikin*. Repository: STIKes Dharma Husada Bandung.
- Anam, A. K., Martiningsih, W., & Ilus, I. (2016). Post-Traumatic Stress Disorder pada Penyintas Erupsi Gunung Kelud berdasarkan Impact of Event Scale-Revised (IES-R) di Dukuh Kali Bladak Kecamatan Nglegok Kabupaten Blitar. *Jurnal Ners Dan Kebidanan (Journal of Ners and Midwifery)*, 3(1), 46–52. <https://doi.org/10.26699/jnk.v3i1.art.p046-052>
- Angel, D., & Chmutina, K. (2024). “Effing Awful!”: developing audio representation as a medium for conveying people’s experiences of flooded homes. *Disaster Prevention and Management*, 1–13. <https://doi.org/10.1108/DPM-01-2024-0033>

- Apriliani, R., Purworini, D., Chasana, R. R. B., & Haryanti, Y. (2024). Public Relations Efforts in Disaster Communication to Build Public Trust. *IOP Conference Series: Earth and Environmental Science*, 1, 1–11. <https://doi.org/10.1088/1755-1315/1357/1/012045>
- Arinata, F. S., Sugiyo, S., Nusantoro, E., Aini, P. N., Mutmainah, M., & Aiman, A.W. (2022). Hubungan Pengetahuan dengan Kesiapsiagaan Bencana Longsor Pada Siswa Sekolah Dasar. *Joyful Learning Journal*, 11(2), 67–72. <https://doi.org/10.15294/jlj.v11i2.57790>
- Asmayanti, A., Cahyani, I., & Idris, N. S. (2020). Model Addie Untuk Pengembangan Bahan Ajar Menulis Teks Eksplanasi Berbasis Pengalaman. *Seminar Internasional Riska Bahasa XIV*, 259–267. <http://proceedings.upi.edu/index.php/riksabahasa>
- Asteria, D. (2016). Optimalisasi Komunikasi Bencana Di Media Massa Sebagai Pendukung Manajemen Bencana. *Jurnal Komunikasi Ikatan Sarjana Komunikasi Indonesia*, 1(1), 1–11. <https://doi.org/10.25008/jkiski.v1i1.30>
- Azizah, M., Khoirudin Apriadi, R., Tri Januarti, R., Winugroho, T., Yulianto, S., Kurniawan, W., & Dewa Ketut Kerta Widana, I. (2021). Kajian Risiko Bencana Berdasarkan Jumlah Kejadian dan Dampak Bencana di Indonesia Periode Tahun 2010 – 2020. *PENDIPA Journal of Science Education*, 6(1), 35–40. <https://doi.org/10.33369/pendipa.6.1.35-40>
- Azwar, S. (2018). *Metode penelitian*. Yogyakarta: Pustaka Pelajar.
- Bachri, S., Irawan, L. Y., Masrurroh, H., Hidiyah, T. M., Hakiki, A. R. R., Billah, E. N., Regita, N., Putri, C., Prastiwi, R. H., & Zimo, H. (2023). Peningkatan Kapasitas Siswa Sekolah Dasar Dalam Kesiapsiagaan Bencana Erupsi Gunung Api Melalui Simulasi Mitigasi Bencana Di Daerah Gunung Semeru. *Jurnal Praksis Dan Dedikasi (JPDS)*, 6(2), 162–171. <https://doi.org/10.17977/um022v6i2p162-171>
- Barclay, J., Few, R., Armijos, M. T., Phillips, J. C., Pyle, D. M., Hicks, A., Brown, S. K., & Robertson, R. E. A. (2019). Livelihoods, Wellbeing and the Risk to Life During Volcanic Eruptions. *Frontiers in Earth Science*, 7, 1–5. <https://doi.org/10.3389/feart.2019.00205>
- BNPB. (2017a). *Buku Pedoman Latihan Kesiapsiagaan Bencana*. https://perpustakaan.bnpb.go.id/bulian/index.php?p=show_detail&id=845
- BNPB. (2017b). *Tanggap, Tangkas, Tangguh menghadapi “Gunung Api”* <https://doi.org/https://youtu.be/aIxvmNAEhZU?si=sLfn9Qn-4v01qXw6>
- BNPB. (2019a). *Buku Saku : Tanggap Tangkas Tangguh Menghadapi Bencana (Cetakan Keempat) - BNPB*. In *Badan Nasional Penanggulangan Bencana*. <https://bnpb.go.id/uploads/24/buku-data-bencana/6-buku-saku-cetakan-4-2019.pdf>
- BNPB. (2019b). *Edukasi Tas Siaga Bencana Bagi Warga Tambakrejo*. <https://doi.org/https://bnpb.go.id/berita/edukasi-tas-siaga-bencana-bagi-warga-tambakrejo>
- BNPB. (2021). *Panduan Kesiapsiagaan Bencana Gunung Api di Saat Pandemi*. <https://doi.org/https://youtu.be/toG6KjowMQM?si=KKi3ULs4Dr7NpQcu>
- BNPB. (2023). *Peraturan Badan Nasional Penanggulangan Bencana Nomor 1 Tahun 2023 Tentang Satu Data Bencana*.

- BNPB. (2024). *Profil Bencana Indonesia*.
<https://doi.org/https://dibi.bnpb.go.id/home/index2>
- BPBD. (2020). *Kesiapsiagaan Hadapi Potensi Erupsi Merapi di Masa Pandemi COVID-19*. <https://bnpb.go.id/berita/kesiapsiagaan-hadapi-potensi-erupsi-merapi-di-masa-pandemi-covid19>
- BPBD Sleman. (2018). *Laporan Tanggap Darurat Erupsi Merapi 2010*.
<https://bpbdslemankab.go.id/wp-content/uploads/2017/11/Tanggap-Darurat-Merapi-2010.pdf>
- BPBD Yogyakarta. (2022). *Buku Saku Terpadu Siap Siaga Bencana*.
<https://bpbdslemankab.go.id/assets/instansi/bpbd/files/buku-saku-terpadu-siap-siaga-bencana-9549.pdf>
- Brydges, C. R. (2019). Effect Size Guidelines, Sample Size Calculations, and Statistical Power in Gerontology. *Innovation in Aging*, 3(4), 1–8.
<https://doi.org/10.1093/geroni/igz036>
- Budhiana, J. (2024). Pengaruh Karakteristik Responden Terhadap Kesiapsiagaan Bencana Banjir Di Desa Pasawahan Wilayah Kerja Puskesmas Cicurug Kabupaten Sukabumi. *Jurnal Kesehatan Kusuma Husada*, 15(1), 71–85.
<https://doi.org/10.34035/jk.v15i1.1243>
- Bujang, M. A., Omar, E. D., Foo, D. H. P., & Hon, Y. K. (2024). Sample size determination for conducting a pilot study to assess reliability of a questionnaire. *Restorative Dentistry and Endodontics*, 49(1), 1–8.
<https://doi.org/10.5395/rde.2024.49.e3>
- Butscher, F., Ellinger, J., Singer, M., & Mall, C. (2023). Influencing factors for the implementation of school-based interventions promoting obesity prevention behaviors in children with low socioeconomic status: A systematic review. *Research Square*, 1–13. <https://doi.org/10.21203/rs.3.rs-2166755/v1>
- Caesar, D. L., & Prasetya, B. A. (2020). Efektifitas Media Poster Dalam Meningkatkan Pengetahuan Sanitasi Dasar Di Sdn 01 Wonosoco Undaan Kudus. *J-KESMAS: Jurnal Kesehatan Masyarakat*, 6(1), 83–91.
<https://doi.org/10.35329/jkesmas.v6i1.5>
- Calvo-Morata, A., Alonso-Fernández, C., Freire, M., Martínez-Ortiz, I., & Fernández-Manjón, B. (2018). Making Understandable Game Learning Analytics for Teachers. *ResearchGate*, 1–11. https://doi.org/10.1007/978-3-319-96565-9_11
- Cachay, G. A., & Cabanillas, C. M. (2024). Educational video games to improve the learning process. *International Journal of Evaluation and Research in Education*, 13(3), 1917–1930. <https://doi.org/10.11591/ijere.v13i3.26432>
- Catedrilla, G. M. B., Lerios, J. L., Sapin, S. B., Lanuang, M. C., & Buama, C. A. C. (2021). An android-based mobile educational game for disaster preparedness: an input to risk reduction management. *Indonesian Journal of Electrical Engineering and Computer Science*, 22(2), 936–943.
<https://doi.org/10.11591/ijeecs.v22.i2.pp936-943>
- Cat.js. (n.d.). *Jungle Level [Musik]*. Diambil dari <https://catjs.org/music>
- Chasanah, U., Febriani, S. D. A., & Minarto, E. (2021). Pendugaan Struktur Bawah Permukaan Gunung Merapi Berdasarkan Analisis Data Anomali Medan Gravitasi Citra Satelit. *Jurnal Fisika Flux: Jurnal Ilmiah Fisika FMIPA*

- Universitas Lambung Mangkurat*, 18(1), 25–34.
<https://doi.org/10.20527/flux.v18i1.8456>
- Chasanah, F., & Sakakibara, H. (2022). Implication of Mutual Assistance Evacuation Model to Reduce the Volcanic Risk for Vulnerable Society: Insight from Mount Merapi, Indonesia. *Sustainability (Switzerland)*, 14(13).
<https://doi.org/10.3390/su14138110>
- Creswell, J. W. (2015). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. SAGE Publications.
- Cvetkovic, V. M., Lipovac, M., & Milojkovic, B. (2016). Knowledge Of Secondary School Students In Belgrade As An Element Of Flood Preparedness. *Teme*, 40(4), 1259–1273. <https://doi.org/10.22190/teme1604259c>
- D’Amico, A., Bernardini, G., Lovreglio, R., & Quagliarini, E. (2023). A non-immersive virtual reality serious game application for flood safety training. *International Journal of Disaster Risk Reduction*, 1–20.
<https://doi.org/10.1016/j.ijdrr.2023.103940>
- Dankbaar, M. (2017). Serious games and blended learning; effects on performance and motivation in medical education. *Perspectives on Medical Education*, 6(1), 58–60. <https://doi.org/10.1007/s40037-016-0320-2>
- Darmawan, I. P. A., & Sujoko, E. (2016). Revisi Taksonomi Pembelajaran Benjamin S. Bloom. *ResearchGate*, 29(1), 30–39.
<https://doi.org/10.24246/j.sw.2013.v29.i1.p30-39>
- Dinas Kependudukan dan Pencatatan Sipil Kabupaten Sleman. (2022). *Profil Kependudukan kabupaten Sleman Tahun 2021*.
- Donner, W. R., & Lavariega-Montforti, J. (2018). Ethnicity, income, and disaster preparedness in Deep South Texas, United States. *Disasters*, 42(4), 719–733.
<https://doi.org/10.1111/disa.12277>
- Dwiyatno, S., Rachmat, E., Sari, A. P., & Gustiawan, O. (2020). Implementasi Virtualisasi Server Berbasis Docker Container. *Prosisko*, 7(2), 165–175.
<https://doi.org/10.30656/prosisko.v7i2.2520>
- Edmonds, M., Grattan, J., & Michnowicz, S. (2015). Volcanic Gases: Silent Killers. *ResearchGate*, 2–20. https://doi.org/10.1007/11157_2015_14
- Elita, M. P. T., Budhiana, J., & Janatri, S. (2023). Hubungan Pengetahuan Dengan Sikap Remaja Tentang Kesiapsiagaan Bencana Gempa Bumi. *Jurnal Health Society*, 12(2), 1–10. <https://doi.org/10.62094/jhs.v12i2.102>
- Epal, B. M., Abellanosa, C., Sarmiento, M. N., & Bacatan, J. (2024). Assessment On Disaster Preparedness, Related-Knowledge, And Adaptation Among Intermediate-Level Students. *European Journal of Social Sciences Studies*, 10(3). <https://doi.org/10.46827/ejsss.v10i3.1809>
- Estri, A. K., Marti, E., & Rahayu, M. H. (2021). the Effectiveness of Android-Based Educational Game Toward High School Students’ Preparedness in Facing Merapi Eruption. *Malaysian Journal of Nursing*, 12(4), 72–76.
<https://doi.org/10.31674/mjn.2021.v12i04.010>
- Estri, A. K., Nugraha, D. A., & Marti, E. (2024). Pembentukan Tim Siaga Bencana Alam Erupsi Merapi di Dusun Gatak Wukirsari Cangkringan Sleman. *Jurnal Karya Untuk Masyarakat*, 5(1), 59–67.
- Evie, S., & Hasni, H. (2022). Faktor-faktor yang Berhubungan dengan

- Kesiapsiagaan Keluarga dalam Tanggap Bencana Tsunami. *Poltekita : Jurnal Ilmu Kesehatan*, 15(4), 409–418. <https://doi.org/10.33860/jik.v15i4.828>
- Fahmi, W. A., & Hizbaron, D. R. (2023). Evaluasi kapasitas masyarakat tangguh bencana di kawasan rawan erupsi gunung api merapi. *Jurnal Teknosains*, 13(1), 62–74. <https://doi.org/10.22146/teknosains.80157>
- Feng, Z., González, V. A., Amor, R., Spearpoint, M., Thomas, J., Sacks, R., Lovreglio, R., & Cabrera-Guerrero, G. (2020). An immersive virtual reality serious game to enhance earthquake behavioral responses and post-earthquake evacuation preparedness in buildings. *Advanced Engineering Informatics*, 1–15. <https://doi.org/10.1016/j.aei.2020.101118>
- Fujii, M., & Kanbara, S. (2019). Analysis of Gender Differences in Disaster Preparedness for Nankai Trough Earthquake. *Health Science Journal*, 13(2), 1–4. <https://doi.org/10.21767/1791-809X.1000644>
- Firmansyah, I., Rasni, H., & Rondhianto. (2014). The Correlation Between Knowledge and behavior preparedness in Facing of Floods And Landslides disaster in adolescents aged 15-18 in SMA Al-Hasan Kemiri Sub district Panti of Jember Regency. *Repository: Universitas Jember*, 1-8.
- Fitriyani, N., & Anjaly, S. M. (2023). Psychological First Aid sebagai Pertolongan Pertama Korban Pasca Bencana: Sebuah Studi Naratif. *Trends in Applied Sciences, Social Sciences, and Education*, 1(1), 7–12.
- Garcia, M. B. (2020). Kinder Learns: An Educational Visual Novel Game as Knowledge Enhancement Tool for Early Childhood Education. *Technologies In Learning*, 27(1), 1–25. <https://doi.org/10.18848/2327-0144/CGP>
- Gargiulo, M. V., Napolitano, F., Amoroso, O., Russo, R., & Capuano, P. (2024). A didactic experience for educating the youngest generations about seismic risk using an escape room. *Frontiers in Communication*, 9, 1–5. <https://doi.org/10.3389/fcomm.2024.1386674>
- Goretti, A., & Musacchio, G. (2024). Serious Games for Seismic Risk Education: The Case of the ENP-CP Project. *GeoHazards*, 5(2), 310–328. <https://doi.org/10.3390/geohazards5020016>
- Gunawan, H. (2021). *Edukasi dan produktivitas masyarakat di masa pandem*. Bandung: LP2M UIN SGD Bandung.
- Hasrida, Ahmad, Sanusi, Syarif, Stang, & Ramadany. (2020). The influence of android-based leukorea education on knowledge of pregnant women at Puskesmas Tamalanrea Makassar. *Sapporo Medical Journal*, 54 (10), 1–5.
- Hastuti, K. P., Rahman, A. M., & Ramadhan, M. F. (2022). Disaster Risk Reduction for Students through Development of Educational Games Lusiana. *Ecology, Environment and Conservation*, 28(2), 589–594. <https://doi.org/10.53550/eec.2022.v28i02.001>
- Herawati, T., Setiawati, D., & Utami, D. S. (2017). Pengetahuan Karang Taruna Tentang Mitigasi Bencana Gempa Bumi Di Desa Wangunharja Lembang. *Jurnal Ilmiah JKA (Jurnal Kesehatan Aeromedika)*, 3(1), 85–91. <https://doi.org/10.58550/jka.v3i1.78>
- Hidayat, F., & Nizar, M. (2021). Model ADDIE (Analysis, Design, Development, Implementation and Evaluation) Dalam Pembelajaran Pendidikan Agama Islam. *Jurnal Inovasi Pendidikan Agama Islam (JIPAI)*, 1(1), 28–38.

- <https://doi.org/10.15575/jipai.v1i1.11042>
- Hoffmann, R., & Muttarak, R. (2017). Learn from the Past, Prepare for the Future: Impacts of Education and Experience on Disaster Preparedness in the Philippines and Thailand. *World Development*, 32–51. <https://doi.org/10.1016/j.worlddev.2017.02.016>
- Hu, D., Gao, J., Sun, Y., & Zhang, F. (2020). A Game-Based Interactive Training System for Improving the Engagement of Hazard Learning and Training. *AIRCC Publishing Corporation*, 10(12), 29–36. <https://doi.org/10.5121/csit.2020.101203>
- Howard, J. P. A., & Jay, T. (2016). Reward, learning and games. *Current Opinion in Behavioral Sciences*, 10, 65–72. <https://doi.org/10.1016/j.cobeha.2016.04.015>
- Iqbal, M., Candra, M. F., Zaki, S., Derose, M., & Najla, N. P. (2023). Optimalisasi Mitigasi Bencana Karang Taruna Se-Kecamatan Dan Warga Desa Lembang. *Indonesian Community Service and Empowerment Journal (IComSE)*, 4(2), 415–422.
- Irnun, J. A. (2024). *Pengaruh Pelatihan Kesiapsiagaan Bencana Berbasis Komunitas Terhadap Cognitive, Affective, Psychomotor (Cap) Pada Kader Kesehatan Desa Di Daerah Rawan Bencana Gunung Merapi Yogyakarta*. Tesis. Universitas Gadjah Mada.
- Irnawati Arwi, Samadi, & Setiawan, C. (2024). Pemanfaatan Stop Disasters Game dalam Peningkatan Pengetahuan dan Pemahaman Pengurangan Risiko Bencana Banjir di SMAN 98 Jakarta. *Jurnal Kependidikan*, 13(4). <https://jurnaldidaktika.org/5085>
- Jati, D. G. P., Wijaya, W., & Setiawan, B. W. (2023). Pembelajaran Hybrid Literasi Informasi Geografis Dan Respon Tanggap Bencana Dengan Simulasi Peran. *Jurnal Pengabdian Masyarakat Berkarya*, 2(1), 1–10. <https://doi.org/https://doi.org/10.62668/berkarya.v2i01.486>
- Jesita, G., & Wahyuni, S. (2023). Gambaran Tingkat Pengetahuan Kesiapsiagaan Masyarakat Menghadapi Bencana Tanah Longsor di Jatiyoso Karanganyar. *SEHATMAS: Jurnal Ilmiah Kesehatan Masyarakat*, 2(2), 395–403. <https://doi.org/10.55123/sehatmas.v2i2.1753>
- John, & Ratey. (2022). *A User's Guide to the Brain: Perception, Attention, and the Four Theaters of the Brain*. Vintage Books.
- Kalqis, Z. P. (2022). Faktor-Faktor Yang Mempengaruhi Tingkat Pengetahuan Masyarakat Dalam Kesiapsiagaan Menghadapi Bencana Banjir Di Rt Kampungbuol Dusun Lugus Desa Kayulompa. *Journal of Nursing Science*, 1–25.
- Kang, S. H. K. (2016). Spaced Repetition Promotes Efficient and Effective Learning: Policy Implications for Instruction. *Policy Insights from the Behavioral and Brain Sciences*, 3(1), 12–19. <https://doi.org/10.1177/2372732215624708>
- Kamaluddin, R., Trisnantoro, L., & Alim, S. (2019a). *Pelatihan dalam peningkatan kapasitas kader kesehatan desa di daerah rawan bencana gunung berapi kabupaten banyumas*. Disertasi. Universitas Gadjah Mada.
- Kamaluddin, R., Trisnantoro, L., & Alim, S. (2019b). Validity and Reliability of

- the Disaster Preparedness Knowledge Instrument for Health Cadres in Volcanic Disaster-Prone Areas. *Bali Medical Journal*, 8(3), 871–877. <https://doi.org/10.15562/bmj.v8i3.1543>
- Kankanamge, N., Yigitcanlar, T., & Goonetilleke, A. (2022). Gamifying Community Education for Enhanced Disaster Resilience: An Effectiveness Testing Study from Australia. *Future Internet*, 14(6). <https://doi.org/10.3390/fi14060179>
- Katherine, D., & Daphna, S. (2024). Dopamine and Learning. In *The Oxford Handbook of Human Memory*, (2nd ed.). Oxford University Press.
- Kemenkes RI. (2016). *Dampak Letusan Gunung Berapi Bagi Kesehatan*. <https://pusatkrisis.kemkes.go.id/dampak-letusan-gunung-berapi-bagi-kesehatan>
- Kemenkes RI. (2023). *Perang dan Gangguan Stres Pasca Trauma*. https://yankes.kemkes.go.id/view_artikel/2912/perang-dan-gangguan-stres-pasca-trauma
- Kerlow, I., Pedreros, G., & Albert, H. (2020). Earth Girl Volcano: characterizing and conveying volcanic hazard complexity in an interactive casual game of disaster preparedness and response. *Geoscience Communication*, 3(2), 343–364. <https://doi.org/10.5194/gc-3-343-2020>
- Kharima, N., Yulianti, & Anjani, A. D. (2022). Pelaksanaan Program Dukungan Psikososial Melalui Psychological First Aid (PFA) Oleh Relawan Bencana Erupsi Semeru Kabupaten Lumajang. *Jurnal Bimbingan Konseling Dan Dakwah Islam*, 19(1), 34–54. <https://doi.org/10.14421/hisbah.2022.191-03>
- Khoshnoud, S., Igarzábal, F. A., & Wittmann, M. (2020). Peripheral-physiological and neural correlates of the flow experience while playing video games: A comprehensive review. *PeerJ*, 8, 1–40. <https://doi.org/10.7717/peerj.10520>
- Kim, S. J., Kang, S. R., Lee, S. H., & Kang, K. A. (2014). The Effect of Coping Knowledge on Emergency Preparedness in Elementary School Students. *Journal of School Nursing*, 30(5), 349–357. <https://doi.org/10.1177/1059840513508325>
- Krathwohl, David, Benjamin., S., Bloom, & Masia, B. B. (1964). *Taxonomy of educational objectives: the classification of educational goals*. Handbook II: Affective Domain. Studies in Philosophy and Education.
- Kurniawati, D., & Suwito, S. (2019). Pengaruh Pengetahuan Kebencanaan Terhadap Sikap Kesiapsiagaan Dalam Menghadapi Bencana Pada Mahasiswa Program Studi Pendidikan Geografi Universitas Kanjuruhan Malang. *Jurnal Pendidikan Dan Ilmu Geografi*, 2(2), 135–142. <https://doi.org/10.21067/jpig.v2i2.3507>
- Kyaw, B. M., Saxena, N., Posadzki, P., Vseteckova, J., Nikolaou, C. K., George, P. P., Divakar, U., Masiello, I., Kononowicz, A. A., Zary, N., & Car, L. T. (2019). Virtual reality for health professions education: Systematic review and meta-analysis by the digital health education collaboration. *Journal of Medical Internet Research*, 21(1), 1–13. <https://doi.org/10.2196/12959>
- Lanzinger, F. (2019). *Classic Game Design: From Pong to Pac-Man with Unity* (2nd). Mercury Learning and Information.
- Lestari, V. D., & Huriah, T. (2022). The influence of health education using game-

- based learning methods on improving smoking prevention behavior among school-age children. *Jurnal Aisyah : Jurnal Ilmu Kesehatan*, 7(4), 2502–4825. <https://doi.org/10.30604/jika.v7i4.1290>
- Li, T., Wang, Q., & Xie, Z. (2019). Disaster response knowledge and its social determinants: A cross-sectional study in Beijing, China. *PLoS ONE*, 14(3), 1–10. <https://doi.org/10.1371/journal.pone.0214367>
- Liu, D., Yang, Z., Xu, X., Wu, S., & Wang, Y. (2024). Assessment and influencing factors of urban residents' flood emergency preparedness capacity: An example from Jiaozuo City, China. *International Journal of Disaster Risk Reduction*, 102. <https://doi.org/10.1016/j.ijdr.2024.104294>
- Mahmud, A. K., & Siddiq, W. A. B. N. (2021). Aplikasi Webgis dalam Mendukung Program Sister Village Sebagai Upaya Pengurangan Risiko Bencana Erupsi Gunung Merapi di Desa Paten Kecamatan Dukun Kabupaten Magelang. *Geo Image (Spatial-Ecological-Regional)*, 10(1), 46–53. <http://journal.unnes.ac.id/sju/index.php/geoimage>
- Makrifah, F. N., & Sudarmilah, E. (2019). Game Edukasi Mitigasi Bencana Gunung Meletus “Petualangan Guntur. *PROtek*, 06(1), 36–41.
- Mambang, Prastya, S. E., Zulfadhilah, M., Cipta, S. P., Marleny, F. D., Melda, Maulida, N. M., Putri, Ayuba, M. S., Rismawati, Wulandari, I., Fikri, R. M., Rahmini, Rinjani, H. S., & Maulida, R. (2022). Pendampingan Pemanfaatan Gamifikasi untuk Pendidikan di Masa Depan. *Jumat Informatika: Jurnal Pengabdian Masyarakat*, 3(1), 21–28. https://doi.org/10.32764/abdimas_if.v3i1.2439
- Martono, K. T. (2015). Pengembangan Game Dengan Menggunakan Game Engine Game Maker. *Jurnal Sistem Komputer*, 5(1), 23–30.
- Matsum, H., & Sarmita, D. (2022). Development of ADDIE Model for Chapter Taharah Learning Based on Game Applications in Junior High School. *Jurnal Pendidikan Islam*, 5(2), 543–554.
- Maulana, G., Hasanah, U., Hanum, S., Urrahmi, S., Dzikri, T. A., & Oktari, R. S. (2022). Disaster education through the adaptation of the werewolf game and acehnese local wisdom. *Journal of Physics: Conference Series*, 1–4. <https://doi.org/10.1051/e3sconf/202234003005>
- Maulida, A., Hanif, H., Kamal, M., & Oktari, R. S. (2023). Roblox-based tsunami survival game: A tool to stimulate early childhood disaster preparedness skills. *E3S Web of Conferences*, 447. <https://doi.org/10.1051/e3sconf/202344702003>
- Menteri Sosial RI. (2019). *Peraturan Menteri Sosial RI No 25 Tahun 2019 Tentang Karang Taruna*.
- Meyer Robert. (2012). Failing to learn from experience about catastrophes: The case of hurricane preparedness. *Journal of Risk and Uncertainty*, 25, 25–50.
- Mitsuhara, H., Tanimura, C., Nemoto, J., & Shishibori, M. (2023). Location-Based Game for Thought-Provoking Evacuation Training. *Multimodal Technologies and Interaction*, 7(6), 1–27. <https://doi.org/10.3390/mti7060059>
- Mohammad-pajoo, E., & Aziz, Ab, K. (2014). Investigating factors for disaster preparedness among residents of Kuala Lumpur. *Natural Hazards and Earth System Sciences Discussions*, 2(5),

- 3683–3709. <https://doi.org/10.5194/nhessd-2-3683-2014>
- Mohamed, A. O. (2025). The Effect of Design on the Viewer's Perception of Media Content and its Role in Problem Solving. *Journal of Ecohumanism*, 4(1), 1432–1447. <https://doi.org/10.62754/joe.v4i1.5956>
- Muir, J. A., Cope, M. R., Angeningsih, L. R., & Brown, R. B. (2020). Community recovery after a natural disaster: Core data from a survey of communities affected by the 2010 Mt. Merapi eruptions in Central Java, Indonesia. *Data in Brief*, 32, 1–6. <https://doi.org/10.1016/j.dib.2020.106040>
- Munasti, K., Putro, K. Z., Fitriani, D., Aziz, U. B. A., Rosmiati, R., & Rahmi, R. (2023). Persepsi Calon Guru PAUD terhadap Kurikulum Berbasis Pendidikan Mitigasi Bencana. *Jurnal Obsesi : Jurnal Pendidikan Anak Usia Dini*, 7(1), 757–768. <https://doi.org/10.31004/obsesi.v7i1.2905>
- Murbawan, I., Ma'ruf, A., & Manan, A. (2017). Kesiapsiagaan Rumah Tangga Dalam Mengantisipasi Bencana Banjir Di Daerah Aliran Sungai (Das) Wanggu (Studi Bencana Banjir Di Kelurahan Lepo-Lepo Kota Kendari). *Ecogreen*, 3(2), 59–69.
- Najafi, M., Ardalan, A., Akbarisari, A., Noorbala, A. A., & Elmi, H. (2017). The Theory of Planned Behavior and Disaster Preparedness. *Plos Currents Disasters*, 1–18. <https://doi.org/10.1371/currents.dis.4da18e0f1479bf6c0a94b29e0dbf4a72>
- Nama, G. F., & Arnoldi, F. (2016). Rancang Bangun Aplikasi Game Edukasi Pembelajaran Aksara Lampung "Ajo dan Atu - Belajar Aksara Lampung ", berbasis Android dengan Sistem Multi-Ending Menggunakan Engine Ren'Py. *Jurnal Teknologi Informasi Dan Ilmu Komputer*, 3(4), 238–247. <https://doi.org/10.25126/jtiik.201634211>
- Narayanasamy, S. K., Muruganatham, D., & Elçi, A. (2019). Crisis and disaster situations on social media streams: An ontology-based knowledge harvesting approach. *Interdisciplinary Journal of Information, Knowledge, and Management*, 14, 343–366. <https://doi.org/10.28945/4420>
- Naryanto, R. F., Delimayanti, M. K., Kriswanto, Indriawan, A. D. N., Sukoco, I., Subagyo, Y., Eko Saputro, W. D., & Athoillah, A. (2022). Sosialisasi Media Edukatif Interaktif “Biopori” Berbasis Virtual Reality Bagi Pemuda Karang Taruna. *Adimas : Jurnal Pengabdian Kepada Masyarakat*, 6(1), 1–12. <https://doi.org/10.24269/adi.v6i1.4146>
- Nastiti, R. P., Pulungan, R. M., & Iswanto, A. H. (2021). Faktor-Faktor yang Berhubungan dengan Kesiapsiagaan Masyarakat dalam Menghadapi Bencana Banjir Di Kelurahan Kebon Pala Jakarta Timur. *Poltekita: Jurnal Ilmu Kesehatan*, 15(1), 48–56. <https://doi.org/10.33860/jik.v15i1.219>
- Neli, H., & Herawati, T. M. (2023). Pengaruh Pengetahuan dan Peran Individu terhadap Kesiapsiagaan Bencana Banjir pada Masyarakat. *Jurnal Ilmu Kesehatan*, 12(1), 11–19.
- Nirmalasari, N., Rizqi Wahyu Hidayati, Dwi Kartika Rukmi, & Arif Adi Setiawan. (2022). Edukasi Audio Visual dalam Kesiapsiagaan Bencana Gunung Meletus pada Anak Usia Sekolah. *Journal of Innovation in Community Empowerment*, 4(2), 84–89. <https://doi.org/10.30989/jice.v4i2.761>
- Nilsen, E., Safran, E., Drake, P., & Sebok, B. (2020). Playing a serious game for

- earthquake preparedness: Effects of resource richness and avatar choice. *Conference on Human Factors in Computing Systems - Proceedings*, 1–7. <https://doi.org/10.1145/3334480.3383105>
- Nofal, A., Alfayyad, I., Khan, A., Al Aseri, Z., & Abu-Shaheen, A. (2018). Knowledge, attitudes, and practices of emergency department staff towards disaster and emergency preparedness at tertiary health care hospital in central Saudi Arabia. *Saudi Medical Journal*, 39(11), 1123–1129. <https://doi.org/10.15537/smj.2018.11.23026>
- Notoatmodjo, S. (2012). *Promosi kesehatan dan perilaku kesehatan*. Jakarta: Rineka Cipta.
- Nugroho, F., Yuniarno, E. M., & Hariadi, M. (2019). The application of natural sciences material in serious game for mitigation disasters socialization based on theory model activity and bloom's taxonomy. *Register: Jurnal Ilmiah Teknologi Sistem Informasi*, 5(2), 106–117. <https://doi.org/10.26594/register.v5i2.1479>
- Nur, R. Y., Wulandari, D., & Novitayanti, E. (2024). Pengaruh Edukasi Kebencanaan Terhadap Kesiapsiagaan Menghadapi Bencana. *Jurnal Ilmu Keperawatan Dan Kebidanan*, 15(2), 267–271. <https://doi.org/10.26751/jikk.v>
- Nuraini, R., & Wijaya, O. (2019). Pengetahuan, Sikap dan Perilaku Kesiapsiagaan Pegawai Rumah Sakit Dalam Menghadapi Bencana Di RSUD Muhammadiyah Bantul. *Journal of Chemical Information and Modeling*, 53(9), 1689–1699.
- Nurasmi. (2020). *Manfaat Omega 3 terhadap Nutrisi Janin: Studi Pengetahuan Ibu Hamil*. Indramayu: CV. Adanu Abimata.
- Nurdiana, D. (2020). Pengembangan Augmented Reality Sebagai Media Edukasi Pengetahuan Bencana Alam Gunung Merapi. *Jurnal Manajemen Informatika (JAMIKA)*, 10(2), 122–132. <https://doi.org/10.34010/jamika.v10i2.2639>
- Olliem, G. F. (2024). Efektivitas Penggunaan Media Animasi Kartun Edukasi Terhadap Minat Belajar Anak SD. *Visual Communication Design, School of Creative Industry*, 14(2), 219–236. <https://journal.uc.ac.id/index.php/vicidi/article/view/5176>
- Olivares-Rodríguez, C., Villagra, P., Mardones, R. E., Cárcamo-Ulloa, L., & Jaramillo, N. (2022). Costa Resiliente: A Serious Game Co-Designed to Foster Resilience Thinking. *Sustainability (Switzerland)*, 14(24), 1–18. <https://doi.org/10.3390/su142416760>
- Onuma, H., Shin, K. J., & Managi, S. (2017). Household preparedness for natural disasters: Impact of disaster experience and implications for future disaster risks in Japan. *International Journal of Disaster Risk Reduction*, 148–158. <https://doi.org/10.1016/j.ijdrr.2016.11.004>
- Onder, O. (2024). The impact of disaster on cognition in geriatric population. *HEALTH SCIENCES QUARTERLY*, 4(2), 93–100. <https://doi.org/10.26900/hsq.2243>
- Opi, I. C., & Sompie, S. R. U. . (2020). *Rancang Bangun Game Edukasi Tanggap Bencana Gempa Dan Tsunami*. Repository: Universitas Sam Ratulangi.
- Oscarido, J., Siswanto, Z. A., Maleke, D. A., & Gunawan, A. A. S. (2022). The

- impact of competitive FPS video games on human's decision-making skills. *Procedia Computer Science*, 539–546. <https://doi.org/10.1016/j.procs.2022.12.167>
- Otani, K., Legono, D., Darsono, S., & Suharyanto, S. (2018). Effects of Disaster Management Programs on Individuals' Preparedness in Mount Merapi. *Journal of the Civil Engineering Forum*, 4(1), 79–90. <https://doi.org/10.22146/jcef.29580>
- Pahleviannur, M. R. (2019). Edukasi Sadar Bencana Melalui Sosialisasi Kebencanaan Sebagai Upaya Peningkatan Pengetahuan Siswa Terhadap Mitigasi Bencana. *Jurnal Pendidikan Ilmu Sosial*, 29(1), 49–55. <https://doi.org/10.23917/jpis.v29i1.8203>
- Pamungkas, T. P., Andriani, R., Akbara, A. W., & Samudra, Y. S. (2022). Sistem Informasi Early Warning System berbasis Website. *Intechno Journal (Information Technology Journal)*, 4(2), 68–74. <https://doi.org/10.24076/intechnojournal.2022v4i2.1565>
- Pane, B., Najooan, X., & Paturusi, S. (2017). Rancang Bangun Aplikasi Game Edukasi Ragam Budaya Indonesia. *Jurnal Teknik Informatika*, 12(1), 1–9.
- Pangestika, R., Wilti, I. R., Zainal, A. U., & Dahlia, S. (2022). Persepsi Masyarakat Tentang Risiko Penyakit Terhadap Kesiapsiagaan Bencana Banjir Di Kecamatan Cabangbungin Kabupaten Bekasi. *Jurnal Kesehatan: Jurnal Dan Aplikasi Teknik Kesehatan Lingkungan*, 19(1), 91–98. <https://doi.org/10.31964/jkl.v19i1.455>
- Pasaribu, L., & Peranginangin, M. (2020). Pengetahuan Dan Sikap Siswa Sma Dalam Menghadapi Bencana Gempa Bumi. *Jurnal Skolastik Keperawatan*, 6(2), 153–159. <https://doi.org/10.35974/jsk.v6i2.2405>
- Pathirage, C., Seneviratne, K., Amaratunga, D., & Haigh, R. (2012). Managing disaster knowledge: Identification of knowledge factors and challenges. *International Journal of Disaster Resilience in the Built Environment*, 3(3), 237–252. <https://doi.org/10.1108/17595901211263620>
- Pitang, Y. E. of T. on P. D. on the P. of E. S. C. in O. the D. of V. E. of M. E. in L. C. E. S., Irman, O., & Nelista, Y. (2019). The Effect of Training on Preparedness Disaster on the Preparedness of Elementary School Children in Overcoming the Disaster of Volcano Eruption of Mount Egon in Lere Catholic Elementary School. *NurseLine Journal*, 4(2), 139–145. <https://doi.org/10.19184/nlj.v4i2.14356>
- Pradika, M. I., Giyarsih, S. R., & Hartono, H. (2018). Peran Pemuda Dalam Pengurangan Risiko Bencana Dan Implikasinya Terhadap Ketahanan Wilayah Desa Kepuharjo, Kecamatan Cangkringan, Kabupaten Sleman, Daerah Istimewa Yogyakarta. *Jurnal Ketahanan Nasional*, 24(2), 261–286. <https://doi.org/10.22146/jkn.35311>
- Pramusinta, Y., & Faizah, S. N. (2022). *Belajar dan Pembelajaran Abad 21 di Sekolah Dasar*. Lamongan: Nawa Litera Publishing.
- Prasetyo, D. N. H., & Hayati, R. (2019). Peningkatan Pengetahuan Kesiapsiagaan Banjir Pengurus Karang Taruna dengan Metode Diskusi Berbantuan Media Audio Visual di Kelurahan Sawah Besar Tahun 2018. *Edu Geography*, 7(3), 1–11. <http://journal.unnes.ac.id/sju/index.php/edugeo%0APeningkatan>

- Prasetyo, E., Syarifah, N. Y., & Ernawati, Y. (2020). The Effect Of Training In The Preparation Of Merapi Mountain Erupsy Disasters On Class VII Students 'Knowledge SMP Negeri 2 Sawangan Magelang District. *Majalah Ilmu Keperawatan Dan Kesehatan Indonesia*, 9(1), 1–6.
- Priatna, & Primulyana, S. (2020). *Memahami gas gunung api*. Bandung: Pusat Vulkanologi dan Mitigasi Bencana Geologi Badan Geologi Kementerian Energi dan Sumber Daya Minera.
- Pribadi, R., Benny, A., Putri, Dewi, A., & Padamo. (2019). *Pengembangan Bahan Ajar*. Tanggerang Selatan: Universitas Terbuka.
- Promsri, C. (2019). Flood Risk Awareness Game (FRAG): Learning to Prepare in Flood Events. *Journal of Contemporary Research in Social Sciences*, 1(7), 151–157. <https://doi.org/10.33094/26410249.2019.17.151.157>
- Pudjiastuti, S. R. (2019). Mengantisipasi Dampak Bencana Alam. *Jurnal Ilmu Pendidikan*, 10(2), 1–14.
- Pusat Vulkanologi dan Mitigasi Bencana Geologi. (2023). *Gunung Api*. <https://vsi.esdm.go.id/portalmbg/>
- Raifman, S., DeVost, M. A., Digitale, J. C., Chen, Y.-H., & Morris, M. D. (2022). Respondent-Driven Sampling: a Sampling Method for Hard-to-Reach Populations and Beyond. *Current Epidemiology Reports*, 9(1), 38–47. <https://doi.org/10.1007/s40471-022-00287-8>
- Riansyah, A. P. S., Hamid, M. A., & Susilo, C. (2022). *Pengaruh Edukasi Mitigasi Bencana Terhadap Kesiapsiagaan Menghadapi Bencana Tanah Longsor Pada Karang taruna Kecamatan Binakal Bondowoso* [Skripsi: Universitas Muhammadiyah Jember]. <http://fikes.unmuhjember.ac.id>
- Rizky, & Permatasari, A. L. (2020). Pendidikan Mitigasi Bencana Erupsi Gunung Api Menggunakan Game Edukatif Pasga (Pasukan Siaga Gunungapi). *Jurnal Penelitian Dan Pengabdian Kepada Masyarakat UNSIQ*, 7(2), 165–169. <https://doi.org/10.32699/ppkm.v7i2.973>
- Roche, C. C., Wingo, N. P., Westfall, A. O., Azuero, A., Dempsey, D. M., & Willig, J. H. (2018). Educational Analytics: A New Frontier for Gamification? *CIN - Computers Informatics Nursing*, 36(9), 458–465. <https://doi.org/10.1097/CIN.0000000000000455>
- Romdhonah, D. L., Sucipto, A., Dede, C., & Nekada, Y. (2019). Pengaruh Edukasi Managemen Bencana Gempa Bumi Terhadap Kesiapsiagaan Siswa Dalam Menghadapi Gempa Bumi. *Jurnal Ilmu Kesehatan*, 10(1), 1–9.
- Rosyady, P. A., & Widotomo, Y. (2022). Purwarupa Monitoring Status Gunung Api Berbasis Internet of Things. *Jurnal Teknologi Elektro*, 13(3), 135–140. <https://doi.org/10.22441/jte.2022.v13i3.002>
- Safran Elizabeth, Drake Peter, Nilsen Erik, Sebok Bryan, Ballesteros Blythe, Paris Annabel, Parezanin Lana, Wood Pencl, Kunz Sylvia, & Udas Max. (2022). *Rehearsing Disaster: Can Video Games Help Young Adults Prepare for Earthquakes?* EGU General Assembly . <https://doi.org/10.5194/egusphere-egu22-10987>
- Sakurai, A., Bisri, M. B. F., Oda, T., Oktari, R. S., Murayama, Y., Nizammudin, & Affan, M. (2018). Exploring minimum essentials for sustainable school disaster preparedness: A case of elementary schools in Banda Aceh City,

- Indonesia. *International Journal of Disaster Risk Reduction*, 29(8), 73–83. <https://doi.org/10.1016/j.ijdrr.2017.08.005>
- Saputra, R., Ramadhan, M. D., Rawin, B. Bin, & Asnawati, S. (2019). Implementasi Game Adventure Berwawasan Pertanian Sebagai Upaya Meningkatkan Minat Pemuda terhadap Pertanian. *Prosiding Konferensi Ilmiah Mahasiswa Unissula (KIMU) Klaster Engineering.*, 622–629. <https://jurnal.unissula.ac.id/index.php/kimueng/article/view/8711>
- Sari, N., Dayurni, P., & Nur, D. M. (2023). Pengembangan Edu-Game dalam Meningkatkan Kesadaran Mitigasi Bencana untuk Anak Usia Dini. *Jurnal Pendidikan Anak Usia Dini*, 4(2), 555–567. <https://doi.org/10.37985/murhum.v4i2.352>
- Sari, R. M., & Ridhwan, R. (2022). The Effect of Gender and Academic Levels Differences on Disaster Preparedness Knowledge of Pre-Service Teachers. *Geosfera Indonesia*, 7(2), 136–149. <https://doi.org/10.19184/geosi.v7i2.30236>
- Scheliga, S., Kellermann, T., Lampert Angelika, Rolke Roman, Spehr Marc, & Habel Ute. (2022). Neural correlates of multisensory integration in the human brain: an ALE meta-analysis. *De Gruyter Brill.*, 34(2), 223–245. <https://doi.org/10.1515/revneuro-2022-0065>
- Schrier, K. (2016). *Knowledge Games: How playing games can solve problems, create insight, and make change*. Johns Hopkins University Press: United States.
- Schimanke, F. (2022). *The Effect Of Using Spaced Repetition In Mobile Learning Games On The Learning Success*. Tesis: University of Bamberg.
- Seddighi, H., Yousefzadeh, S., López López, M., & Sajjadi, H. (2020). Preparing children for climate-related disasters. *BMJ Paediatrics Open*, 4(1), 1–5. <https://doi.org/10.1136/bmjpo-2020-000833>
- Setiawati, I., Utami, G. T., & Sabrian, F. (2020). Gambaran Pengetahuan Dan Sikap Perawat Tentang Kesiapsiagaan Pelayanan Kesehatan Dalam Menghadapi Bencana Banjir. *Jurnal Ners Indonesia*, 10(2), 158–169. <https://doi.org/10.31258/jni.10.2.158-169>
- Shane, N. M., Putri, N. S., & Fahmi, A. Y. (2023). The Effect of Virtual and Augmented Reality Technologies for Volcano Eruption Disaster Management in The Build of Environments. *Journal of Rural Community Nursing Practice*, 1(2), 222–235. <https://doi.org/10.58545/jrcnp.v1i2.198>
- Shi Zhongying. (2023). *Introduction: Knowledge and Education*. Springer: Singapore.
- Sharifzadeh, N., Kharrazi, H., Nazari, E., Tabesh, H., Khodabandeh, M. E., Heidari, S., & Tara, M. (2020). Health education serious games targeting health care providers, patients, and public health users: Scoping review. *JMIR Serious Games*, 8(1), 1–17. <https://doi.org/10.2196/13459>
- Shum, A. K. Y., Lai, E. S. Y., Leung, W. G., Cheng, M. N. S., Wong, H. K., So, S. W. K., Law, Y. W., & Yip, P. S. F. (2019). A digital game and school-based intervention for students in Hong Kong: Quasi-experimental design. *Journal of Medical Internet Research*, 21(4), 1–13. <https://doi.org/10.2196/12003>
- Sijbrandij, M., Horn, R., Esliker, R., O'may, F., Reiffers, R., Ruttenberg, L., Stam,

- K., de Jong, J., & Ager, A. (2020). The effect of psychological first aid training on knowledge and understanding about psychosocial support principles: A cluster-randomized controlled trial. *International Journal of Environmental Research and Public Health*, 17(2), 1–11. <https://doi.org/10.3390/ijerph17020484>
- Sieron., Ferrés, Siebe, Constantinescu, Capra, Connor, Connor, Groppelli, & González Zuccolotto. (2019). Ceboruco hazard map: part II—modeling volcanic phenomena and construction of the general hazard map. *Natural Hazards*, 96(2), 1–41. <https://doi.org/10.1007/s11069-019-03577-5>
- Sinambela, L. (2023). *Metodologi Penelitian Kuantitatif: Teoritik & Praktik*. Depok:Rajawali Pers.
- Siregar, P. H., & Marpaung, R. F. (2021). *Perbedaan Pengetahuan Sebelum dan Sesudah Masa Penyuluhan Mencuci Tangan pada Pandemi Covid-19 pada Lansia*. Padang Sidempuan: Inovasi Pertama Internasional.
- Sitinjak, B. (2019). *Virtual Reality Tour Gunung Anak Krakatau*. Skripsi: Universitas Lampung.
- Sjuchro, D. W., Khadijah, U. L. S., Viannisa, N., & Lavigne, F. (2024). Media literacy's role toward Roda Jari Mas Radio listeners in dealing with disasters. *Jurnal Kajian Informasi & Perpustakaan*, 12(1), 35–50. <https://doi.org/10.24198/jkip.v12i1.51256>
- 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, 1–17. <https://doi.org/10.1016/j.ijdrr.2018.09.001>
- So'o, R. W., Ratu, K., Folamauk, C. L. H., & Amat, A. L. S. (2022). Faktor - Faktor yang Mempengaruhi Pengetahuan Masyarakat di Kota Kupang. *Cendana Medical Journal*, 23(1), 76–87. <https://ejournal.undana.ac.id/index.php/CMJ/article/view/6809>
- Stevany, D., Suprayogi, A., & Sukmono, A. (2016). Pemetaan Jalur Evakuasi Bencana Letusan Gunung Raung Dengan Metode Network Analisis. *Geodesi Undip*, 5(4), 91–100.
- Subandi, A., Noerjoedianto, D., & Sary, E. V. (2024). Impact of the “Mengabu (Facing Ash Storms) Disaster Preparedness” Program on Adolescents’ Knowledge About Disaster Preparedness in Kresik Tuo Village. *International Journal of Health and Social Behavior*, 4, 1–9. <https://doi.org/10.62951/ijhsb.v1i3.93>
- Subhana, M. (2023). User Interface and User Experience Disaster Education Game Application Using Heuristic Evaluation. *Bit-Tech (Binary Digital - Technology)*, 6(2), 241–247. <https://doi.org/10.32877/bt.v6i2.1070>
- Sudana, A. A. K. O., Suarwibawa, K., & Parwa, I. P. P. P. N. (2015). Perancangan Aplikasi Game Edukasi Mitigasi Bencana Alam Berbasis Android Sebagai Media Pembelajaran Dalam Mitigasi Bencana Alam. *Dielektika*, 2(2), 81–179. <http://erepo.unud.ac.id/2544/1/434ef9ab7b4ab2f049839bf3cb450894.pdf>
- Sugara, A. S., Kusuma, F. H. D., & Sutriningsih, A. (2018). Hubungan Pengetahuan

- Dengan Sikap Kesiapsiagaan Masyarakat Menghadapi Erupsi Gunung Kelud Pada Fase Mitigasi. *Nursing News*, 3(1), 448–458.
- Suharto, N. T., Mardiana, T., & Widodo, R. (2021). Kesiapsiagaan Masyarakat Kawasan Rawan Bencana III (KRB III) dalam Menghadapi Ancaman Erupsi Gunung Merapi di Kabupaten Klaten. *Procedding Universitas Sebelas Maret*, 153–161. <https://proceeding.uns.ac.id/geospatial/article/view/18/31>
- Sulastri, T., Safitri, R., & Luzien, N. (2022). Edukasi Kesehatan Penanganan Pertama Pada Luka Bakar (Combustio) Kepada Anggota Dharma Wanita Persatuan Universitas Sultan Ageng Tirtayasa. *Jurnal Pengabdian Dan Pengembangan Masyarakat Indonesia*, 1(1), 30–33. <https://doi.org/10.56303/jppmi.v1i1.25>
- Sunengsih, A., Hardiansyah, A. M., & Lisana, D. N. H. (2023). Pengembangan Game Edukasi Petualang Cerdas Berbasis Web Menggunakan Metode MDLC. *Media Jurnal Informatika*, 15(2), 162–168. <https://doi.org/10.35194/mji.v15i2.3907>
- Susilowati, F., & Siswanta, L. (2016). Peningkatan Kapasitas Masyarakat Dalam Menghadapi Risiko Bencana berbasis Gender. *Semar*, 5(1), 4–12.
- Suwanmolee, S., & Ali, A. H. M. (2020). The Gamification of Covid-19 Pandemic as an Active Learning Tool in Disaster Education. *Atlantis Press*, 365–369. <https://doi.org/10.2991/assehr.k.210203.149>
- Suyuti, Wahyuningrum, E. M. P., Jamil, A. M., Nawawi, L. M., Aditia, D., & Rusmayani, Li. A. G. N. (2023). Analisis Efektivitas Penggunaan Teknologi dalam Pendidikan Terhadap Peningkatan Hasil Belajar. *Journal on Education*, 06(01), 1–11. <http://jonedu.org/index.php/joe>
- Taghipour, E., Vizeshfir, F., & Zarifsanaiy, N. (2023). The effect of gamification-based training on the knowledge, attitudes, and academic achievement of male adolescents in preventing substance and internet addiction. *BMC Medical Education*, 23(1), 1. <https://doi.org/10.1186/s12909-023-04858-1>
- Tam, G., Huang, Z., & Chan, E. Y. Y. (2018). Household preparedness and preferred communication channels in public health emergencies: A cross-sectional survey of residents in an asian developed Urban city. *International Journal of Environmental Research and Public Health*, 15(8), 2–13. <https://doi.org/10.3390/ijerph15081598>
- Thangagiri, & Naganathan. (2016). Online Educational Games-Based Learning in Disaster Management Education: Influence on Educational Effectiveness and Student Motivation. *International Conference on Technology for Education*, 88–91. <https://doi.org/10.1109/T4E.2016.24>
- Trisanti, I., & Khoirunnisa, F. N. (2018). Kinerja Kader Kesehatan Dalam Pelaksanaan Posyandu Di Kabupaten Kudus. *Jurnal Ilmu Keperawatan Dan Kebidanan*, 9(2), 1–8. <https://doi.org/10.26751/jikk.v9i2.470>
- Tuladhar, G., Yatabe, R., Dahal, R. K., & Bhandary, N. P. (2015). Disaster risk reduction knowledge of local people in Nepal. *Geoenvironmental Disasters*, 2(1), 1–12. <https://doi.org/10.1186/s40677-014-0011-4>
- Vazquez-Vilchez, M., Carmona-Molero, R., & Ouariachi-Peralta, T. (2024). How to communicate and educate more effectively on natural risk issues to improve disaster risk management through serious games. *EGUsphere*, 1–33.

- <https://doi.org/10.5194/egusphere-2024-994>
- Ulya, S., Hapidin, & Akbar, Z. (2023). SIGANA Banjir: Game Edukasi Kesiapsiagaan Bencana Banjir Untuk Anak Usia 5-6 Tahun. *Jurnal Pendidikan Anak Usia Dini*, 4(2), 151–164. <https://doi.org/10.37985/murhum.v4i2.311>
- Undang-Undang Republik Indonesia Nomor 24 Tahun 2007. (2007). *Penanggulangan Bencana*. <https://bpbd.jakarta.go.id/perpustakaan/17/uu-no-24-tahun-2007-tentang-penanggulangan-bencana>
- UNISDR. (2015). *Disaster Risk Reduction and Resilience in the 2030; Agenda for Sustainable Development (Issue October)*.
- Unver, V., Basak, T., Tastan, S., Kok, G., Guvenc, G., Demirtas, A., Ayhan, H., Köse, G., Iyigun, E., & Tosune, N. (2018). Analysis of the effects of high-fidelity simulation on nursing students' perceptions of their preparedness for disasters. *Internasional Emergency Nursing*, 38(1), 1–7. <https://doi.org/10.1016/j.ienj.2018.03.002>
- United Nations. (2023). *Sendai Framework In Disaster Risk Reduction 2015-2023*. <https://sendaiframework-mtr.undrr.org/>
- Usher, K., Mills, J., & West, C. (2015). Cross-sectional survey of the disaster preparedness of nurses across the Asia–Pacific region. *Nursing & Health Sciences*, 17(4), 434–443. <https://onlinelibrary.wiley.com/doi/10.1111/nhs.12211>
- Utari, W. R., Lisum, K., & Marlina, P. W. N. (2020). *the Relationship of Respondents' Characteristics and Information Sources With Knowledge About Iron Deficiency*. 12 No 3(June), 379–386. <https://doi.org/10.32583/keperawatan.v12i3.773>
- Wafi, F. H., Rondhianto, & Kushariyadi. (2016). Pengaruh metode contextual teaching and learning (CTL) dengan pendekatan somatis, auditori, visual, intelektual (SAVI) terhadap kesiapsiagaan bencana (medical first respondent) gunung meletus pada karang taruna di Desa Rowosari Kecamatan Sumber Jambe Kabu. *Pustaka Kesehatan*, 4(1), 108–115. <https://jurnal.unej.ac.id/index.php/JPK/article/view/2537>
- Wakil, K., Omer, S., & Omer, B. (2017). Impact of Computer Games on Students. *International Journal of Engineering Technologies and Management Research*, 3(8), 1–12. <https://doi.org/10.29121/ijetmr.v5.i6.2018.243>
- Wasliyah Siti. (2018). Komik Bencana Meningkatkan Sikap Kesiapsiagaan Bencana Pada Anak Sekolah Dasar Negeri Bulakan Kecamatan Gunung Kencana Banten Selatan. *Jurnal Kesehatan Palembang*, 13(1), 28–36.
- We Are Social. (2023). *We Are Social Geming*. <https://wearesocial.com/id/gaming/>
- Widyastuti, E., & Susiana. (2019). Using the ADDIE model to develop learning material for actuarial mathematics. *Journal of Physics: Conference Series*, 1–8. <https://doi.org/10.1088/1742-6596/1188/1/012052>
- Wikan, P. A., Kinanthi, R., & Khoir, A. Z. (2022). Understanding The Roles of Experience, Self Efficacy, and Attitude in SIBAT Community for Earthquake Disaster Preparedness. *Social, Humanities, and Educational Studies (SHES): Conference Series*, 5(4), 206–211. <https://doi.org/10.20961/shes.v5i4.69053>
- Winarni, E. W., Purwandari, E. P., & Hervianti, Y. (2018). Mobile Educational

- Game for Earthquake Disaster. *ARPN Journal of Engineering and Applied Sciences*, 13(7), 2612–2618. www.arpnjournals.com ISSN 1819-6608%0AMOBILE
- Winarni, E. W., & Purwandari, E. P. (2018). Disaster Risk Reduction for Earthquake Using Mobile Learning Application to Improve the Students Understanding in Elementary School. *Mediterranean Journal of Social Sciences*, 9(2), 205–214. <https://doi.org/10.2478/mjss-2018-0040>
- Winarti, W., & Barbara, L. (2020). Peningkatan Pengetahuan Kesiapsiagaan Bencana dan Improving Disaster Preparedness Knowledge and Utilizing Information. *Proceeding of the National Seminar LPPM UMP*, 1(1), 590–595.
- Widodo, D. R., Nugroho, S. P., & Asteria, D. (2018). Analisis Penyebab Masyarakat Tetap Tinggal di Kawasan Rawan Bencana Gunung Merapi (Studi di Lereng Gunung Merapi Kecamatan Cangkringan, Kabupaten Sleman Daerah Istimewa Yogyakarta). *Jurnal Ilmu Lingkungan*, 15(2), 135–142. <https://doi.org/10.14710/jil.15.2.135-142>
- World Health Organization. (2020). *Disaster and emergency definition training packag*. WHO/EHA Pan African emergency training centre, Addis Ababa Updated Retrieved from <https://apps.who.int/disasters/repo/7656.pd>.
- World Health Organization. (2024). *Adolescent and young adult health*. <https://www.who.int/news-room/fact-sheets/detail/adolescents-health-risks-and-solutions>
- Wu, R., Xu Guandong, Chen Enhong, Liu QI, & Ng Wan. (2017). Knowledge or Gaming?: Cognitive Modelling Based on Multiple-Attempt Response. *Association for Computing Machinery*, 321–329. <https://doi.org/10.1145/3041021.3054156>
- Wulandari, F., Budijanto, B., Bachri, S., & Utomo, D. H. (2023). The relationship between knowledge and disaster preparedness of undergraduates responding to forest fires. *Jamba: Journal of Disaster Risk Studies*, 15(1). <https://doi.org/10.4102/JAMBA.V15I1.1408>
- Yanuar, A., Oktamanicka Dayu, G., Mariam, E., Belqis, M., Marvel Shane, N., & Febria Nuartha, Y. (2021). Pemberdayaan Manajemen Bencana Gunung Raung Berbasis Virtual Reality Pada Masyarakat Desa Jambewangi. *Jurnal Pengabdian Masyarakat Kesehatan*, 7(2), 112–118. <https://doi.org/10.33023/jpm.v7i2.774>
- Yilmaz, I. E., & Sancak, M. E. (2022). Educational Computer Game for Eartquake. *Journal of Learning and Teaching in Digital Age*, 7(1), 99–107. <https://doi.org/10.53850/joltida.1000528>
- Yoshima Nekada, C. D., Lestari Manuaba, I. A. S., & Damayanti, S. (2021). Edukasi Penanganan Korban Erupsi Gunung Berapi Pada Karang Taruna. *Prosiding Seminar Nasional Program Pengabdian Masyarakat*, 1–13. <https://doi.org/10.18196/ppm.26.523>
- Yuliano, A., Kartika, K., & Alfandi, M. (2019). Hubungan pengetahuan dan sikap relawan bencana dengan keterampilan melakukan triase metode start di kota bukittinggi. *Prosiding Seminar Kesehatan Perintis*, 2(1), 52–55. <https://jurnal.stikesperintis.ac.id/index.php/PSKP/article/view/374>

- Za'im, L. U. (2020). Pengembangan game edukasi “beruang pintar (belajar bangun ruang pintar)” untuk memfasilitasi pemahaman konsep. *UNION: Jurnal Ilmiah Pendidikan Matematika*, 8(2), 289–300.
- Zakiyah, Z., Arisanty, D., Alviawati, E., Setiawan, F. A., Saputra, A. N., & Syahril, S. (2022). Pengaruh Game Edukasi Wasikerman (Waspada Dan Siaga Kebakaran Permukiman) Terhadap Peningkatan Pengetahuan Siswa Akan Mitigasi Kebakaran Permukiman. *Vidya Karya*, 37(2), 44–53. <https://doi.org/10.20527/jvk.v37i2.13067>
- Zhahira, L. C., & Mutiaz, I. R. (2023). Game Edukasi ‘Infected Bananas!’ melalui TikTok BRIN sebagai Media Pengenalan Riset bagi Remaja. *Jurnal Communio : Jurnal Jurusan Ilmu Komunikasi*, 12(2), 175–187. <https://doi.org/10.35508/jikom.v12i2.9194>
- Zid, M., Irma, A., Sofyan Hardi, O., Nugratama Hijrawadi, S., Hasyim Asyari, W., Arif, Z., Aulia, R., Aulia, R., & Apriani, S. (2021). Penguatan Kapasitas Karang Taruna Dalam Menghadapi Bencana Di Kecamatan Sukamakmur. *Prosiding Seminar Nasional Pengabdian Kepada Masyarakat*, 1–8. <http://journal.unj.ac.id/unj/index.php/snppm>
- Zukhri, S., Nurhidayati, I., & Purnomo, R. T. (2017). Pengelolaan Resiko Bencana di Desa KRB III Gunung Merapi Klaten. *Jurnal Keperawatan Muhammadiyah*, 2(1), 1–17.