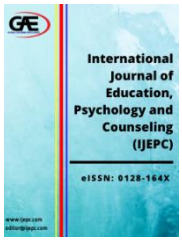
International Journal of Education, Psychology and Counseling
IJEPC
EISSN : 0128-164X
Volume 10 Issue 61 (December 2025) PP. 1008-1022
DOI 10.35631/IJEPC.1061069



INTERNATIONAL JOURNAL OF EDUCATION, PSYCHOLOGY AND COUNSELLING (IJEPC)
www.ijepc.com

YOUTH RESILIENCE IN CLIMATE-RELATED DISASTERS: A BIBLIOMETRIC AND MAPPING APPROACH

Rafizah Zahri[1*], Abd Halim Md Ali[2], Yarina Ahmad[3]

[1] Malaysia-Japan International Institute of Technology, Universiti Teknologi Malaysia, 54100 Wilayah Persekutuan Kuala Lumpur, Malaysia
Email: rafizah80@graduate.utm.my
[2] Malaysia-Japan International Institute of Technology, Universiti Teknologi Malaysia, 54100 Wilayah Persekutuan Kuala Lumpur, Malaysia
Email: abd.halim@utm.my
Faculty of Administrative Science and Policy Studies, Institute of Biodiversity and Sustainable Development(IBSD), Universiti Teknologi MARA, Shah Alam, 40450 Selangor, Malaysia
[3] Faculty of Administrative Science and Policy Studies, Institute of Biodiversity and Sustainable Development(IBSD), Universiti Teknologi MARA, Shah Alam, 40450 Selangor, Malaysia
Email: yarina@uitm.edu.my
[*] Corresponding Author

Article Info:

Article history:
Received date: 22.10.2025
Revised date: 08.11.2025
Accepted date: 01.12.2025
Published date: 17.12.2025

To cite this document:

Zahri, R., Ali, A. H. M., & Ahmad, Y. (2025). Youth Resilience In Climate-Related Disasters: A Bibliometric And Mapping Approach *International Journal of Education, Psychology and Counseling, 10* (61), 1008-1022.

DOI: 10.35631/IJEPC.1061069

Abstract:

The growing number and severity of climate-related disasters highlight the pressing need to understand how young populations develop resilience in the face of environmental crises. Despite the growing recognition of youth as both vulnerable and resourceful actors in disaster risk reduction, systematic evidence mapping of this domain remains limited. This research discusses the gap by conducting a bibliometric analysis on the theme of Youth Resilience in Climate-Related Disasters using data sourced from the Scopus database. This research aims to resolve the fragmented knowledge and lack of consolidated insights into global research trends, collaborations, and thematic structures in this emerging field. The methodology involved four key steps: first, data collection through Scopus advanced searching using the keywords "youth," "resilience," and "disaster," yielding a final dataset of 665 documents (2005–2025); second, data analysis using Scopus Analyzer to generate statistical trends and graphical outputs; third, data cleaning and harmonisation using OpenRefine to ensure accuracy and consistency; and fourth, visualisation of co-authorship, keyword co-occurrence, and country collaboration networks through VOSviewer. The numerical results revealed a steady growth in publication trends, peaking in 2025, with the United States, United Kingdom, as well as Australia emerging as the leading contributors. Meanwhile, developing countries such as Indonesia, Bangladesh, and Malaysia

International Journal of Education, Psychology and Counseling
IJEPC
EISSN : 0128-164X
Volume 10 Issue 61 (December 2025) PP. 1008-1022
DOI 10.35631/IJEPC.1061069

demonstrated increasing yet comparatively limited contributions. Co-occurrence keyword mapping generated six distinct clusters, highlighting the dominance of themes such as mental health, community resilience, disaster preparedness, and coping strategies among youth. Furthermore, co-authorship analysis indicated strong international collaboration, with developed countries serving as central hubs of knowledge exchange. To conclude, this bibliometric research contributes to the body of knowledge by consolidating fragmented research, identifying influential works, visualising global collaboration networks, and highlighting future directions. The findings reinforce the importance of youth-centred resilience strategies in climate-related disaster contexts and provide a comprehensive reference point for researchers, policymakers, and practitioners seeking to strengthen disaster preparedness and adaptation frameworks.

Keywords:

Youth, Resilience, Disasters, Climate-Related

Introduction

Climate change is increasingly known as a significant driver of natural disasters, which in turn have profound impacts on various populations, particularly youth. The frequency and intensity of climate-related disasters like floods, droughts, as well as wildfires are escalating, posing severe threats to the mental and physical well-being of young people. Youth, due to their developmental phase, are particularly susceptible to the negative impacts of these disasters, yet they also possess unique capacities for resilience and adaptation. Understanding the aspects that contribute to youth resilience in the face of climate-related disasters is vital for creating effective interventions and policies that mitigate these impacts and foster a more resilient future generation.

Literature Review

Research indicates that climate-related disasters have significant psychological impacts on youth, including increased levels of anxiety, depression, and post-traumatic stress disorder (PTSD) (Akpan et al., 2025; Boyd et al., 2024; Lai et al., 2024). For instance, studies in Africa have shown that climate stresses like floods and droughts intensify existing societal issues, leading to heightened negative emotions and mental health challenges among young people (Akpan et al., 2025). Similarly, in Australia, regional youth exposed to severe flooding and fires report feelings of helplessness and hopelessness, which are compounded by pre-existing mental health problems (Boyd et al., 2024). These findings underscore the demand for targeted mental health interventions as well as support systems to discuss the distinct difficulties faced by youth in disaster-prone areas.

Moreover, the role of youth as active agents in disaster resilience is increasingly recognised (Zahri, Md Ali, Matsuura, et al., 2025). Children and adolescents can significantly contribute to reducing vulnerabilities in their communities by participating in climate change mitigation and disaster preparedness programs (Pickering et al., 2022; Reckner et al., 2024; Seddighi et al., 2020). For example, the Youth Advocacy for Resilience to Disasters (YARDs) program in the United States has demonstrated the potential of youth to develop and advocate for green infrastructure solutions to resolve flooding and other climate-related risks (Reckner et al., 2024). Such programs not only enhance the resilience of communities but also empower youth

International Journal of Education, Psychology and Counseling
IJEPC
EISSN : 0128-164X
Volume 10 Issue 61 (December 2025) PP. 1008-1022
DOI 10.35631/IJEPC.1061069

by providing them with the skills and knowledge required to navigate and mitigate the impacts of climate change.

The resilience of youth during the climate-related disasters is shaped by a mix of social, individual, as well as environmental aspects. Studies have identified key resilience-enabling factors, involving self-efficacy, self-esteem, social support, as well as community engagement (Ahmad et al., 2022; McDonald-Harker, Drolet, Sehgal, et al., 2021; Niu et al., 2021). For instance, findings from the 2013 Alberta floods in Canada reveal that peer support and caregiver psychological support are critical in fostering resilience among youth and children (McDonald-Harker, Drolet, & Sehgal, 2021; McDonald-Harker, Drolet, Sehgal, et al., 2021). These factors not only help mitigate the immediate psychological impacts of disasters but also contribute to long-term recovery and well-being.

Furthermore, integrating innovative educational approaches and digital tools into disaster preparedness programs can significantly enhance community resilience (Zahri, Md Ali, Rambat, et al., 2025). Traditional school-based disaster education programs are increasingly being supplemented with online and digital formats, which include virtual reality and digital games, to engage children and adolescents more effectively (Seddighi et al., 2020). Such approaches not only increase disaster risk perception and preparedness among young people but also equip them with practical skills and knowledge to cope with and respond to disasters. Additionally, the use of social media and other digital platforms can facilitate community support and collective action, further strengthening the resilience of youth and their communities (Börner, 2023; Napawan et al., 2023).

The concept map in Figure 1 highlights the multifaceted dimensions of youth resilience in climate-related disasters, emphasising mental, educational, community, and individual factors. At the psychological level, youth face significant mental health impacts, including depression and climate anxiety, which can undermine their ability to cope with environmental crises. However, resilience can be strengthened through educational interventions such as disaster management training and climate education, which equip young people with practical knowledge and adaptive skills. Beyond formal learning, community support systems, including advocacy groups and community organisations, provide collective empowerment and social solidarity that foster resilience. On the individual level, factors influencing resilience, such as mindfulness training and self-efficacy, enhance personal coping strategies and confidence in managing disaster challenges. Collectively, these interconnected domains illustrate that youth resilience is not solely an individual attribute but a dynamic outcome shaped by psychological well-being, education, community networks, and personal development. By addressing these dimensions in a holistic manner, societies can better prepare young people to withstand and adapt to the growing risks of climate-related disasters, ensuring their role as active contributors in disaster risk reduction and sustainable development.

International Journal of Education, Psychology and Counseling
IJEPC
EISSN : 0128-164X
Volume 10 Issue 61 (December 2025) PP. 1008-1022
DOI 10.35631/IJEPC.1061069

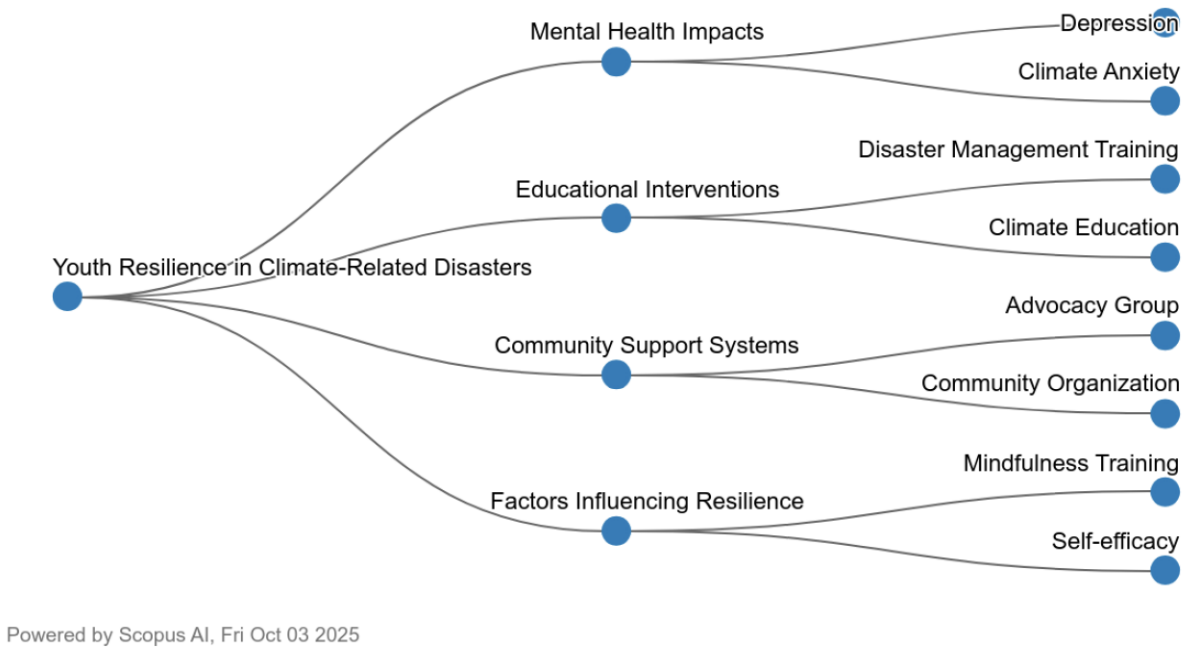


Figure 1: Concept map from Scopus AI on Youth Resilience in Climate-Related Disasters

In conclusion, the resilience of youth during the climate-related disasters is a multifaceted concept that encompasses psychological, social, and environmental dimensions. While youth are especially susceptible to the negative effects of these disasters, they also possess unique capacities for resilience and adaptation. By acknowledging and discussing the aspects that contribute to youth resilience, and by engaging youth as active agents in disaster preparedness and climate change mitigation, we can foster a more resilient future generation capable of navigating the challenges posed by a changing climate.

Methodology

Bibliometrics pertains to the systematic collection, organisation, and analysis of bibliographic information obtained from scholarly publications (Alves et al., 2021; Assyakur & Rosa, 2022; Verbeek et al., 2002). Additionally, fundamental statistical measures, for example, identifying publishing journals, the years of publication, as well as significant authors (Wu & Wu, 2017), bibliometrics incorporates advanced methodologies, including document co-citation analysis. The execution of an effective literature review needs a meticulous as well as iterative approach to choosing adequate keywords, exploring existing literature, and performing an extensive analysis. This approach enhances the progress of a comprehensive bibliography and produces reliable results (Fahimnia et al., 2015). The investigation concentrated on highly influential publications, as they provide significant findings into the theoretical frameworks that inform the research domain. In order to guarantee the data precision, SCOPUS was utilised as the principal source for data acquisition (Al-Khoury et al., 2022; di Stefano et al., 2010; Khiste & Paithankar, 2017). Furthermore, to uphold research quality, the analysis was restricted to articles published in peer-reviewed scholarly journals, intentionally omitting books and lecture notes (Gu et al., 2019). Utilising Elsevier's Scopus, renowned for its

International Journal of Education, Psychology and Counseling
IJEPC
EISSN : 0128-164X
Volume 10 Issue 61 (December 2025) PP. 1008-1022
DOI 10.35631/IJEPC.1061069

extensive coverage, relevant publications were amassed from 2005 through 2025 for subsequent analysis.

Data Search Strategy

For the bibliometric analysis on youth resilience in climate-related disasters, a carefully structured Scopus advanced search strategy was employed to capture relevant and high-quality data while eliminating unrelated studies. The search string focused on key population terms, such as youth, adolescent, teen, young people, and young person, combined with the resilience dimension (resilience) and disaster-related contexts (disaster, calamity, catastrophe, flood, hazard). To ensure currency and relevance, the timeline was restricted to publications between 2005 and 2025, thereby excluding outdated works published before 2005. The inclusion criteria targeted core academic outputs, for instance, reviews, journal articles, conference papers, book chapters, as well as books, while excluding non-academic or less rigorous sources. Additionally, the search was constrained to English-language publications to maintain consistency and accessibility in analysis. Importantly, deliberate exclusion criteria were applied to remove unrelated contexts, including keywords such as terrorism, violence, Covid-19, coronavirus, and pandemic, which, while associated with resilience studies, fall outside the specific focus on climate-related disasters. This refinement minimised thematic dilution and ensured that the dataset remained concentrated on environmental disaster resilience rather than broader trauma or public health crises. After applying these filters and screening against the selection criteria (as outlined in Table 2), a total of 665 relevant publications were identified as the final dataset (accessed in October 2025). This dataset represents a robust and context-specific body of literature, providing an evidence base to examine trends, influential works, and global contributions in the field. It reflects not only the growing academic recognition of youth resilience in disaster contexts but also the importance of methodical filtering to isolate studies that directly align with the intended research scope.

Table 1: The Search String.

Scopus	TITLE-ABS-KEY ((youth OR adolescent OR teen* OR "young people" OR "young person") AND "resilien*" AND (disaster OR calamity OR catastrophe OR flood OR hazard)) AND PUBYEAR > 2004 AND PUBYEAR < 2026 AND (LIMIT-TO (DOCTYPE , "ar") OR LIMIT-TO (DOCTYPE , "re") OR LIMIT-TO (DOCTYPE , "ch") OR LIMIT-TO (DOCTYPE , "cp") OR LIMIT-TO (DOCTYPE , "bk")) AND (LIMIT-TO (LANGUAGE , "English")) AND (EXCLUDE (EXACTKEYWORD , "Terrorism") OR EXCLUDE (EXACTKEYWORD , "Violence") OR EXCLUDE (EXACTKEYWORD , "Coronavirus Disease 2019") OR EXCLUDE (EXACTKEYWORD , "Pandemic") OR EXCLUDE (EXACTKEYWORD , "Covid-19"))

Table 2: The Selection Criterion Is Searching

Criterion	Inclusion	Exclusion
Language	English	Non-English
Timeline	2005 – 2025	< 2005

International Journal of Education, Psychology and Counseling
IJEPC
EISSN : 0128-164X
Volume 10 Issue 61 (December 2025) PP. 1008-1022
DOI 10.35631/IJEPC.1061069

Literature type	Journal (Article), Review, Book Chapter, Conference Paper, Book	Non: Journal (Article), Review, Book Chapter, Conference Paper, Book)

Data Analysis

VOSviewer is a bibliometric analysis tool created by Nees Jan van Eck and Ludo Waltman at Leiden University in the Netherlands (van Eck & Waltman, 2010, 2017). This software is comprehensively utilised for the visualisation and analysis of scientific literature, with a particular focus on generating intuitive network visualisations, clustering related entities, as well as producing density maps. Its multifaceted capabilities facilitate the exploration of co-citation, co-authorship, as well as keyword co-occurrence networks, thereby equipping scholars with an extensive understanding of the research landscape. The interactive interface, along with regular updates, guarantees dynamic and efficient navigation through extensive datasets. The capacity of VOSviewer to calculate metrics, tailor visualisations, as well as its compatibility with diverse bibliometric data sources render it an invaluable asset for researchers pursuing insights within intricate research domains.

A notable attribute of VOSviewer is its capability to change complex bibliometric datasets into visually comprehensible charts and maps. Emphasising network visualisation, the software proficiently clusters associated items, investigates keyword co-occurrence patterns, as well as generates density maps. Researchers gain from its user-friendly interface, allowing both beginners and experienced users to navigate research environments with ease. The continuous progress of VOSviewer ensures its pre-eminence in bibliometric analysis, delivering significant findings via the computation of metrics and customisable visualisations. Its flexibility in accommodating various types of bibliometric data, including citation networks and co-authorship, establishes VOSviewer as a versatile and essential instrument for researchers aiming for a profound understanding and substantive findings within their research fields.

Datasets containing information such as publication year, title, author name, journal, citations, and keywords in PlainText format were retrieved from the Scopus database, covering the period from 2004 to December 2024. These datasets were then analysed using VOSviewer software version 1.6.19. By applying VOS clustering and mapping techniques, the software facilitated the assessment and creation of bibliometric maps. Serving as an alternative to the Multidimensional Scaling (MDS) approach, VOSviewer focuses on positioning items in low-dimensional spaces so that the distance between any two items accurately reflects their level of relatedness and similarity (van Eck & Waltman, 2010). In this sense, VOSviewer functions similarly to MDS (Appio et al., 2014). However, unlike MDS, which relies primarily on calculating similarity measures such as cosine or Jaccard indices, VOS uses a more suitable normalization technique for co-occurrence frequencies, the association strength (ASij), as proposed (Van Eck & Waltman, 2007):

$$AS_{ij} = \frac{c_{ij}}{w_i w_j}$$

International Journal of Education, Psychology and Counseling
IJEPC
EISSN : 0128-164X
Volume 10 Issue 61 (December 2025) PP. 1008-1022
DOI 10.35631/IJEPC.1061069

which is "proportional to the ratio between on the one hand the observed number of co-occurrences of i and j and on the other hand the expected number of co-occurrences of i and j under the assumption that co-occurrences of i and j are statistically independent" (Van Eck & Waltman, 2007).

Findings

RQ1: What Are The Research Trends In These Studies According To The Year Of Publication?

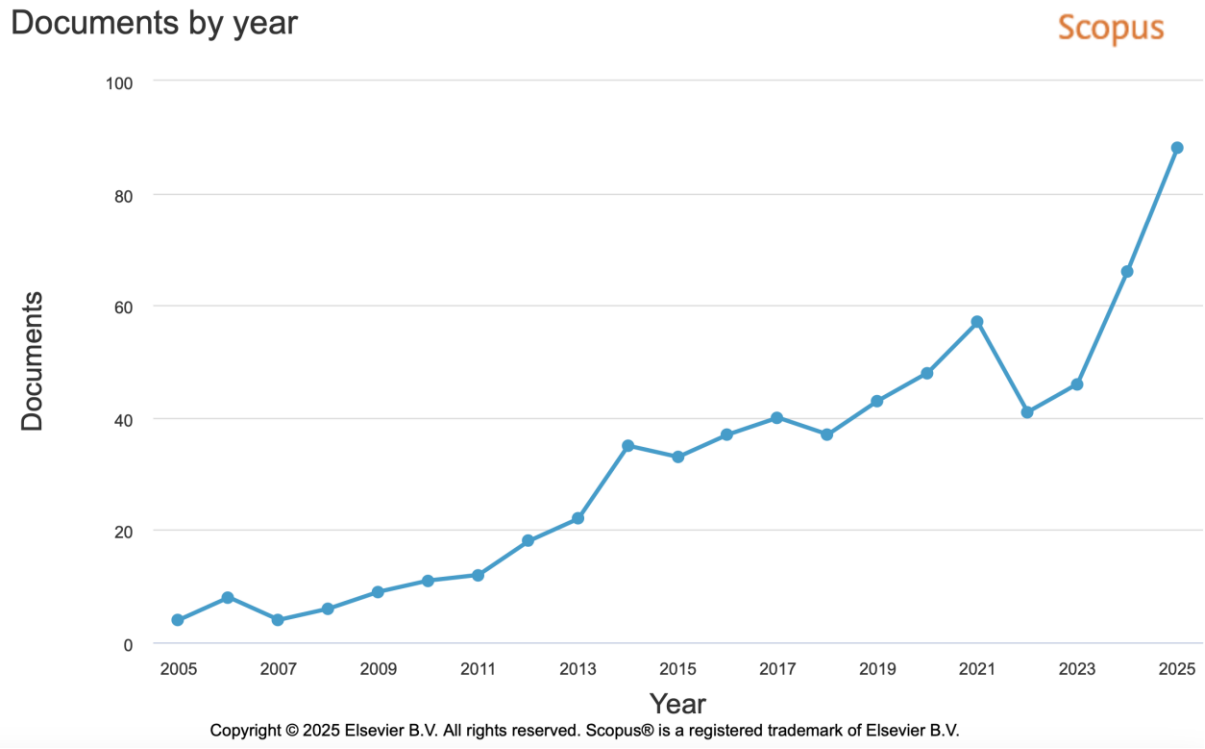


Figure 2: Number Of Documents Based On Year Of Publication (2005-2025)

The publication trend on youth resilience in climate-related disasters from 2005 to 2025 demonstrates a clear trajectory of growth, with three distinct phases of development. The initial period, from 2005 to around 2011, shows minimal research activity, with fewer than 15 documents published per year. This reflects the early stage of academic recognition, where resilience studies were largely focused on broader populations and disaster risk reduction (DRR) frameworks rather than youth specifically. Between 2012 and 2017, a steady increase is visible, with publications rising from around 20 to over 40 annually, coinciding with the culmination of the Hyogo Framework for Action (2005–2015), which emphasised resilience as a global priority and likely stimulated scholarly interest in youth as a vulnerable group in disaster contexts. This phase reflects growing acknowledgement of the importance of integrating education, mental health, and community-based strategies into resilience studies.

From 2018 onwards, the field experiences a more accelerated rise, reaching 57 publications in 2021, a temporary dip in 2022–2023, and then surging to nearly 90 publications by 2025—the highest recorded output. This sharp growth can be attributed to the Sendai Framework for Disaster Risk Reduction (2015–2030), which underscores youth participation in resilience-

International Journal of Education, Psychology and Counseling
IJEPC
EISSN : 0128-164X
Volume 10 Issue 61 (December 2025) PP. 1008-1022
DOI 10.35631/IJEPC.1061069

building, and the intensifying global discourse on climate change. Additionally, high-profile youth climate activism movements, such as *Fridays for Future*, and the increased recognition of climate anxiety and mental health impacts among young people have further spurred research interest. The post-2020 boom is also influenced by the COVID-19 pandemic, which has magnified vulnerabilities and challenges to resilience among youth in crisis situations, prompting comparative and interdisciplinary studies. Overall, the upward trend underscores that youth resilience has become a critical lens in climate adaptation and DRR research, shaped by international frameworks, global crises, and the growing involvement of youth voices in climate action.

RQ2: What Are The Top 10 Most Cited Articles?

Table 3: Most Cited Articles

No	Authors	Year	Source title	Cited by
1.	Masten (2014)	2014	Child Development	1086
2.	Masten & Obradović (2008)	2008	Ecology and Society	436
3.	Yu et al. (2011)	2011	Comprehensive Psychiatry	267
4.	Sanson et al. (2019)	2019	Child Development Perspectives	220
5.	Sapienza & Masten (2011)	2011	Current Opinion in Psychiatry	204
6.	Leykin et al. (2013)	2013	American Journal of Community Psychology	198
7.	Ronan & Johnston (2005)	2005	Promoting Community Resilience in Disasters: The Role for Schools, Youth, and Families	193
8.	Karaırmak (2010)	2010	Psychiatry Research	173
9.	Bender et al. (2007)	2007	Child and Youth Care Forum	173
10.	Stanke et al. (2012)	2012	PLoS Currents	170

The citation analysis of the most influential articles on youth resilience in climate-related disasters and related contexts reveals that seminal works published between 2005 and 2019 have laid the foundation for the field. The most cited article is by Masten (2014), titled "*Global Perspectives on Resilience in Children and Youth*," with 1,086 citations, which highlights its role as a cornerstone in resilience theory and its application to child growth. Other highly cited works include Obradović & Masten (2008), with 436 citations, and Yu et al. (2011), with 267 citations, both of which focus on resilience measurement and developmental approaches, reflecting the scholarly demand for robust frameworks and tools. The prominence of articles in psychology, psychiatry, and development journals underscores the interdisciplinary nature of resilience studies, with contributions spanning mental health, community development, and disaster preparedness. Collectively, these articles highlight the centrality of psychometric tools,

International Journal of Education, Psychology and Counseling
IJEPC
EISSN : 0128-164X
Volume 10 Issue 61 (December 2025) PP. 1008-1022
DOI 10.35631/IJEPC.1061069

developmental theories, and disaster recovery frameworks in establishing a knowledge base for resilience research.

The high citation counts of these works can be attributed to their theoretical significance, methodological rigour, and policy relevance. Articles such as Levkin et al. (2013), introducing community resilience assessment scales, and Ronan & Johnston (2005), emphasising community roles in disaster preparedness, gained traction because they offered practical applications in addition to theoretical advancements. Moreover, works addressing the mental health outcomes of disasters (i.e., Stanke et al., 2012) resonated with policymakers and practitioners in both the climate and health sectors. The concentration of citations in earlier works reflects their function as seminal references that are continually built upon in subsequent studies, while more recent publications, such as those by Sanson et al. (2019), with 220 citations, reveal the growing urgency of climate crisis discourse among children and youth. Overall, the citation landscape illustrates how foundational theories, combined with applied frameworks, have shaped global scholarship, policy, and interventions related to youth resilience.

RQ3: Where Are The Top 10 Countries Based On The Number Of Publications?

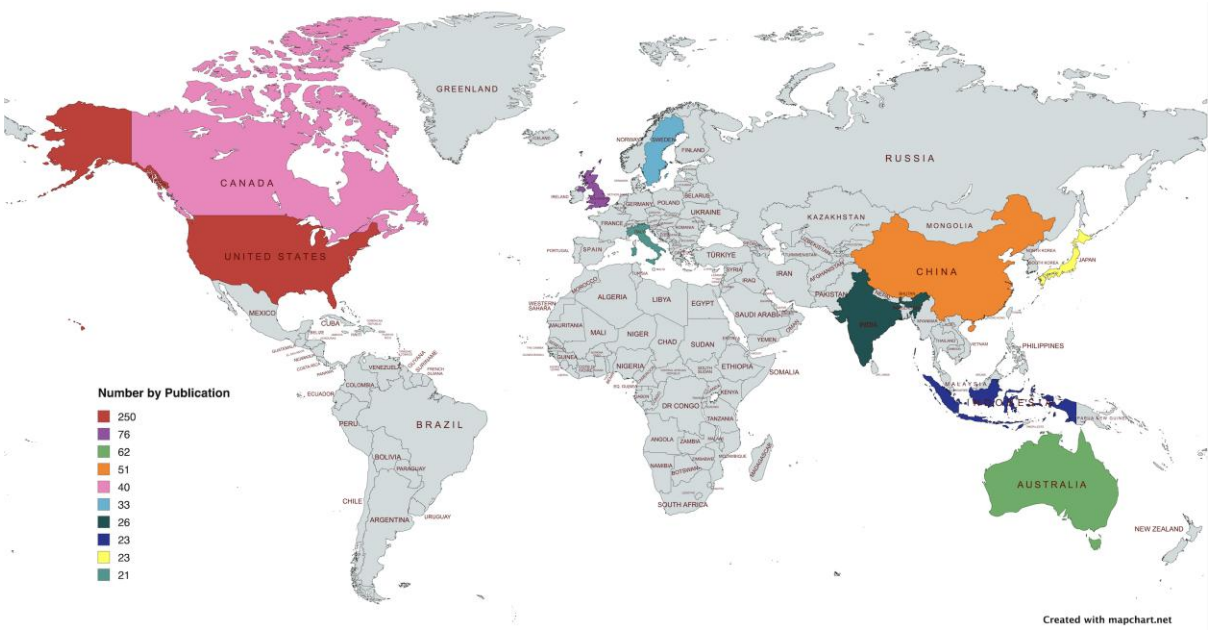


Figure 3: Top 10 Countries Based On The Number Of Publications

The bibliometric distribution of publications on youth resilience in climate-related disasters shows significant geographical disparities, with the United States leading by a large margin (250 publications), followed by the United Kingdom (76) and Australia (62). This dominance reflects the strong research infrastructure, availability of funding, and long-standing academic focus on disaster management, mental health, and climate adaptation in these countries. The U.S., in particular, has a long tradition of resilience studies linked to frequent natural disasters such as hurricanes, floods, and wildfires, which likely explains its leading contribution. Similarly, the UK and Australia have positioned themselves as key centres of climate change and disaster risk reduction (DRR) research, supported by policy frameworks and international collaborations. Other high contributors, such as China (51) and Canada (40),

International Journal of Education, Psychology and Counseling
IJEPC
EISSN : 0128-164X
Volume 10 Issue 61 (December 2025) PP. 1008-1022
DOI 10.35631/IJEPC.1061069

highlight the role of countries experiencing climate vulnerabilities and extreme events, where research is often tied to government initiatives and adaptation strategies.

Meanwhile, countries such as Sweden (33), India (26), Indonesia (23), Japan (23), and Italy (21) represent diverse contexts where youth resilience research is emerging but remains comparatively modest. For Sweden and other European countries, a strong policy emphasis on sustainability and youth participation explains the high level of academic engagement. In Asia, India, Indonesia, and Japan's involvement reflects their exposure to frequent climate-related disasters like floods, tsunamis, as well as typhoons, which necessitate community- and youth-focused resilience strategies. The relatively lower output compared to Western countries can be attributed to resource constraints, language barriers, and less established academic networks in global publication platforms. Nonetheless, their contributions are crucial as they bring perspectives from highly vulnerable regions, enriching the global understanding of youth resilience in climate-related contexts. This distribution suggests that while research leadership remains concentrated in developed nations, emerging economies and disaster-prone regions are steadily expanding their contributions to the field.

RQ4: What Are The Popular Keywords Related To The Study?

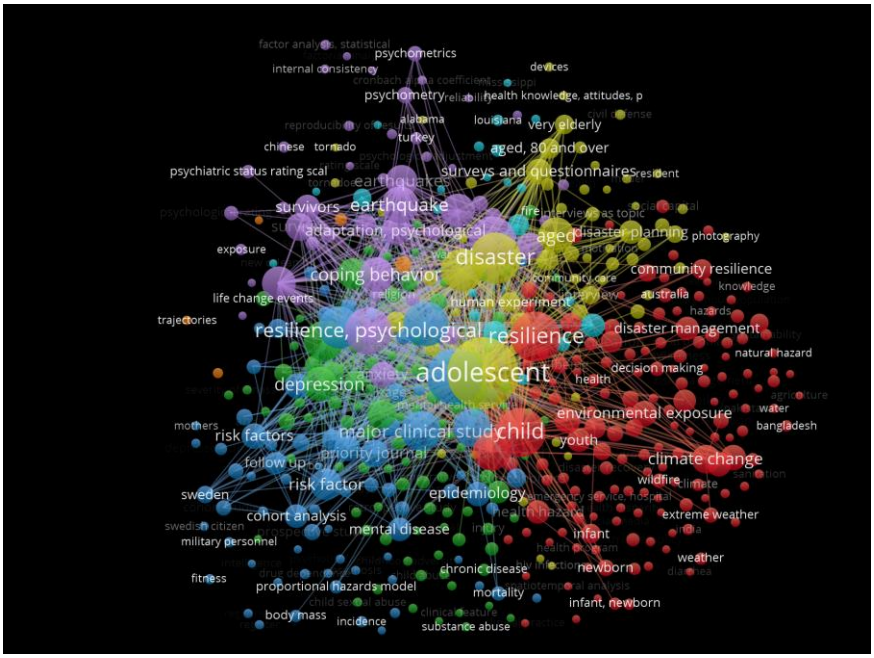


Figure 4: Popular Keywords Related To The Study by VOSviewer

The concept of co-occurrence analysis of author keywords in VOSviewer is based on identifying how frequently certain keywords appear together across publications, thereby mapping the thematic structure of a research field. In this context, each keyword represents a research topic, and the co-occurrence links reflect the strength of association between those topics. VOSviewer then visualises these links in a network map where keywords are grouped into clusters according to their relationships, showing how research areas are interconnected. By applying the full counting method with a minimum occurrence threshold of five, from a total of 3,853 keywords, 478 met the requirement for analysis. The minimum cluster size was set to five, which resulted in the generation of six major clusters. This methodological setting

International Journal of Education, Psychology and Counseling
IJEPC
EISSN : 0128-164X
Volume 10 Issue 61 (December 2025) PP. 1008-1022
DOI 10.35631/IJEPC.1061069

ensures that the analysis captures recurring, significant terms while filtering out noise from rarely used keywords, allowing for a clearer and more reliable representation of the intellectual landscape in youth resilience and disaster-related studies.

The findings make a significant contribution to the body of knowledge by emphasizing the dominant research themes and intersections in this field. High-frequency keywords such as "*adolescent* " (360 occurrences), "*adult* " (227), "*resilience"* (161), and "psychological" (161) reflect the core focus on age-specific populations, psychological resilience, and disaster contexts. The presence of terms such as *mental health, posttraumatic stress disorder, depression, coping behaviour, social support,* and *community resilience* further indicates that the research is multidisciplinary, spanning psychology, health sciences, disaster management, and social sciences. The clustering outcome suggests that knowledge production in this domain is not isolated but interlinked, with youth resilience studied in relation to both individual psychological adaptation and broader social-environmental systems. This reinforces the growing recognition that resilience in climate-related disasters must be understood holistically, encompassing personal coping mechanisms, community support structures, and policy-driven frameworks, thereby advancing theoretical, practical, and policy-oriented discussions in disaster resilience scholarship.

RQ5: What Is The Co-Authorship By Countries' Collaboration?

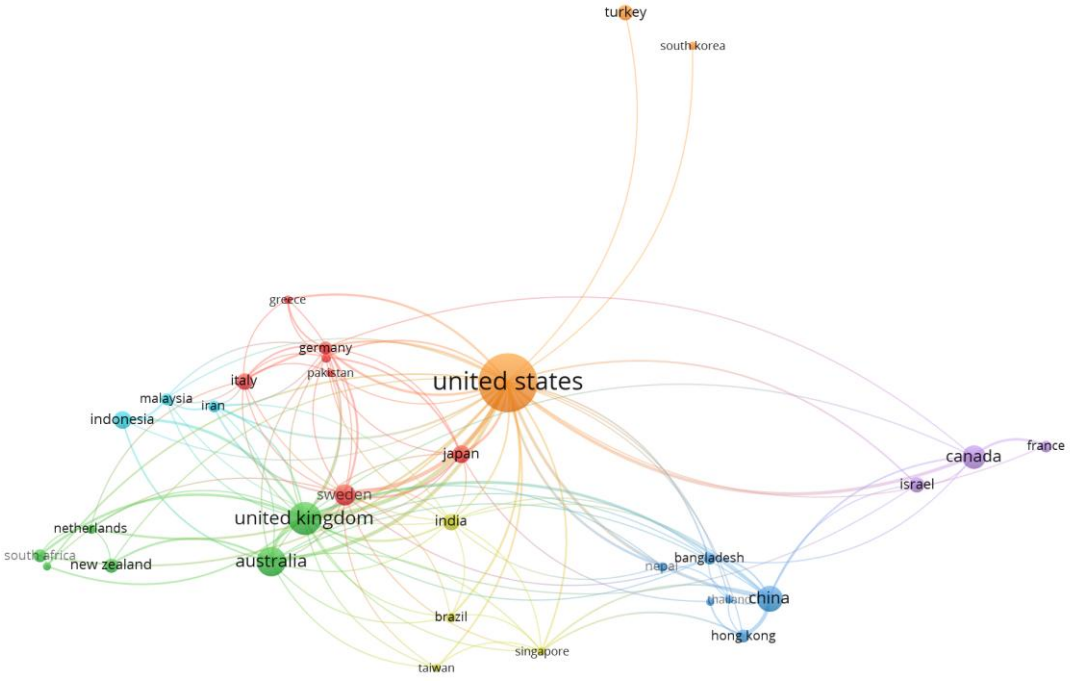


Figure 5: Co-Authorship By Countries' Collaboration by VOSviewer

The concept of co-occurrence co-authorship by countries in VOSviewer is used to map and visualise international research collaborations. It identifies how often authors from different countries co-publish academic work and measures the strength of their collaborative links. Each country is represented as a node in the network, and the connections (or edges) between them indicate the frequency and intensity of joint publications. The larger the node, the higher the publication volume, while the thickness of links reflects stronger international collaboration. For this analysis, the full counting method was applied with a minimum

International Journal of Education, Psychology and Counseling
IJEPC
EISSN : 0128-164X
Volume 10 Issue 61 (December 2025) PP. 1008-1022
DOI 10.35631/IJEPC.1061069

threshold of 5 documents**,** resulting in 32 eligible countries. A minimum cluster size of 5 was set, producing 7 clusters that group countries into collaborative communities based on their co-authorship patterns. This ensures that only significant and recurring international collaborations are represented in the network, highlighting both regional and global partnerships.

The findings show that leading contributors, for example, the United Kingdom, the United States, Sweden, as well as Australia, serve as central hubs in global collaboration networks, with high total link strength values (TLS: 95, 68, 40, and 33, respectively). These countries frequently partner with others, reflecting their role in driving cross-border knowledge production and shaping the discourse on youth resilience and climate-related disasters. In contrast, developing nations such as Indonesia, Bangladesh, Malaysia, and the Philippines are present but demonstrate weaker collaborations, with lower TLS values, highlighting gaps in global research integration despite their vulnerability to disasters. Co-authorship by countries' collaboration defines the joint publication of research across national boundaries, which enriches the body of knowledge by combining diverse contexts, methodologies, and resources. Such collaborations not only strengthen academic networks but also ensure that research findings are more representative, inclusive, and applicable to addressing global challenges in resilience and disaster management.

Conclusion

The aim of this research was to perform a bibliometric analysis of publications on youth resilience in climate-related disasters**,** aiming to consolidate fragmented knowledge and highlight global patterns, influential works, as well as collaborative networks in this emerging area. The analysis aimed to address questions related to research trends, highly cited works, contributing countries, keyword co-occurrences, and international collaborations among co-authors. The key findings indicate that research output on this topic has grown steadily from 2005 to 2025, with a notable acceleration after 2018, reflecting the influence of global frameworks like the Sendai Framework for Disaster Risk Reduction and the rise of youth climate activism. The United Kingdom, the United States, as well as Australia emerged as dominant contributors, both in terms of volume and citation influence, while developing nations such as Indonesia, Bangladesh, and Malaysia have begun to contribute, albeit at a more modest level. Keyword mapping revealed six thematic clusters centred on mental health, community resilience, disaster preparedness, and coping strategies, while co-authorship analysis showed strong international collaborations, with developed countries serving as hubs of global knowledge exchange.

This research contributes to the field by offering a systematic overview of the intellectual structure and development of youth resilience research, offering insights into how scholarly attention has evolved and where future directions may lie. The results highlight the significance of youth as both vulnerable and resourceful actors in disaster contexts, underscoring the need for policies and interventions that integrate mental health support, community engagement, and educational strategies. However, limitations include the reliance on a single database (Scopus), which may omit pertinent studies indexed elsewhere, and the exclusion of non-English publications, potentially limiting regional perspectives. Future research could expand data sources, incorporate qualitative analyses, and investigate policy impacts to develop a more comprehensive understanding. Overall, this bibliometric study reinforces the importance of youth-centred resilience strategies in addressing climate-related disasters and demonstrates the

International Journal of Education, Psychology and Counseling
IJEPC
EISSN : 0128-164X
Volume 10 Issue 61 (December 2025) PP. 1008-1022
DOI 10.35631/IJEPC.1061069

value of bibliometric approaches in mapping knowledge development, guiding future research, and supporting evidence-based decision-making in disaster risk reduction.

Acknowledgements
This research was not funded by any grant.

References

Ahmad, G., Utami, R. N., & La Ede, A. R. (2022). The Relationship Between Self-respect, Self-efficacy, and Social Support With Disaster Resilience Among Adolescents in Indonesia: A Cross-sectional Design. *Malaysian Journal of Medicine and Health Sciences*, *18*, 84–88. https://doi.org/10.47836/mjmhs.18.6.13

Akpan, U. U., Ja'Afar, I. K., & Eke, S. C. (2025). Addressing the Psychological Impact of Climate-Induced Disasters on Young People in Africa: Challenges and Pathways Forward. *Cambridge Prisms: Global Mental Health*, *12*. https://doi.org/10.1017/gmh.2024.77

Al-Khoury, A., Hussein, S. A., Abdulwhab, M., Aljuboori, Z. M., Haddad, H., Ali, M. A., Abed, I. A., & Flayyih, H. H. (2022). Intellectual Capital History and Trends: A Bibliometric Analysis Using Scopus Database. *Sustainability (Switzerland)*, *14*(18). https://doi.org/10.3390/su141811615

Alves, J. L., Borges, I. B., & De Nadae, J. (2021). Sustainability in complex projects of civil construction: Bibliometric and bibliographic review. *Gestao e Producao*, *28*(4). https://doi.org/10.1590/1806-9649-2020v28e5389

Appio, F. P., Cesaroni, F., & Di Minin, A. (2014). Visualising the structure and bridges of the intellectual property management and strategy literature: a document co-citation analysis. *Scientometrics*, *101*(1), 623–661. https://doi.org/10.1007/s11192-014-1329-0

Assyakur, D. S., & Rosa, E. M. (2022). Spiritual Leadership in Healthcare: A Bibliometric Analysis. *Jurnal Aisyah : Jurnal Ilmu Kesehatan*, *7*(2). https://doi.org/10.30604/jika.v7i2.914

Bender, K., Thompson, S. J., McManus, H., Lantry, J., & Flynn, P. M. (2007). Capacity for survival: Exploring strengths of homeless street youth. *Child and Youth Care Forum*, *36*(1), 25–42. https://doi.org/10.1007/s10566-006-9029-4

Börner, S. (2023). *Emotions matter: EMPOWER-ing youth by integrating emotions of (chronic) disaster risk into strategies for disaster preparedness*. https://www.scopus.com/inward/record.uri?eid=2-s2.0-85150026699&doi=10.1016%2Fj.ijdrr.2023.103636&partnerID=40&md5=8c49dfbf41f86544e27133f62a510258

Boyd, C. P., Jamieson, J., Gibson, K., Duffy, M., Williamson, M., & Parr, H. (2024). Eco-anxiety among regional Australian youth with mental health problems: A qualitative study. *Early Intervention in Psychiatry*, *18*(12), 1022–1031. https://doi.org/10.1111/eip.13549

di Stefano, G., Peteraf, M., & Veronay, G. (2010). Dynamic capabilities deconstructed: A bibliographic investigation into the origins, development, and future directions of the research domain. *Industrial and Corporate Change*, *19*(4), 1187–1204. https://doi.org/10.1093/icc/dtq027

Fahimnia, B., Sarkis, J., & Davarzani, H. (2015). Green supply chain management: A review and bibliometric analysis. In *International Journal of Production Economics* (Vol. 162, pp. 101–114). https://doi.org/10.1016/j.ijpe.2015.01.003

International Journal of Education, Psychology and Counseling
IJEPC
EISSN : 0128-164X
Volume 10 Issue 61 (December 2025) PP. 1008-1022
DOI 10.35631/IJEPC.1061069
Gu, D., Li, T., Wang, X., Yang, X., & Yu, Z. (2019). Visualising the intellectual structure and evolution of electronic health and telemedicine research. *International Journal of Medical Informatics*, *130*. https://doi.org/10.1016/j.ijmedinf.2019.08.007

Karaırmak, Ö. (2010). Establishing the psychometric qualities of the Connor-Davidson Resilience Scale (CD-RISC) using exploratory and confirmatory factor analysis in a trauma survivor sample. *Psychiatry Research*, *179*(3), 350–356. https://doi.org/10.1016/j.psychres.2009.09.012

Khiste, G. P., & Paithankar, R. R. (2017). Analysis of Bibliometric term in Scopus. *International Research Journal*, *01*(32), 78–83.

Lai, B. S., Riobueno-Naylor, A., Baum, C., & Hawkins, S. S. (2024). Population-level effects of Hurricane Sandy on adolescent health. *Journal of Affective Disorders*, *365*, 553–562. https://doi.org/10.1016/j.jad.2024.08.108

Leykin, D., Lahad, M., Cohen, O., Goldberg, A., & Aharonson-Daniel, L. (2013). Conjoint Community Resiliency Assessment Measure-28/10 Items (CCRAM28 and CCRAM10): A Self-report Tool for Assessing Community Resilience. *American Journal of Community Psychology*, *52*(3–4), 313–323. https://doi.org/10.1007/s10464-013-9596-0

Masten, A. S. (2014). Global Perspectives on Resilience in Children and Youth. *Child Development*, *85*(1), 6–20. https://doi.org/10.1111/cdev.12205

Masten, A. S., & Obradović, J. (2008). Disaster preparation and recovery: Lessons from research on resilience in human development. *Ecology and Society*, *13*(1). https://doi.org/10.5751/ES-02282-130109

McDonald-Harker, C., Drolet, J. L., Sehgal, A., Brown, M. R. G., Silverstone, P. H., Brett-MacLean, P., & Agyapong, V. I. O. (2021). Social-Ecological Factors Associated With Higher Levels of Resilience in Children and Youth After Disaster: The Importance of Caregiver and Peer Support. *Frontiers in Public Health*, *9*. https://doi.org/10.3389/fpubh.2021.682634

McDonald-Harker, C., Drolet, J., & Sehgal, A. (2021). A Strength-based Approach to Exploring Factors that Contribute to Resilience among Children and Youth Impacted by Disaster. *British Journal of Social Work*, *51*(5), 1897–1916. https://doi.org/10.1093/bjsw/bcab109

Napawan, N. C., Snyder, B. L., & Ferguson, B. (2023). *RESILIENT BY YOUTH ENGAGEMENT: The Alameda Creek Atlas*. https://www.scopus.com/inward/record.uri?eid=2-s2.0-85169347564&doi=10.4324%2F9781003335276-15&partnerID=40&md5=0ec9aa0f3a1190ae8a4a0b2ca9aa611f

Niu, Y., Jiang, N., & Jiang, X. (2021). Factors related to the resilience of Tibetan adolescent survivors ten years after the Yushu earthquake. *International Journal of Disaster Risk Reduction*, *65*. https://doi.org/10.1016/j.ijdrr.2021.102554

Pickering, C. J., Al-Baldawi, Z., McVean, L., Amany, R. A., Adan, M., Baker, L., Al-Baldawi, Z., & L. O'Sullivan, T. (2022). "It's Like Youth are Talking Into a Microphone That is not Plugged in": Engaging Youth in Disaster Risk Reduction Through Photovoice. *Qualitative Health Research*, *32*(14), 2126–2146. https://doi.org/10.1177/10497323221136485

Reckner, M., Tien, I., Smith, S., Omunga, P., Alemdar, M., & Hyde, A. (2024). Impact of Youth Education on Green Stormwater Infrastructure Recommendations to Increase Equity and Resilience in Marginalised Communities. *Journal of Water Resources Planning and Management*, *150*(9). https://doi.org/10.1061/JWRMD5.WRENG-6315

International Journal of Education, Psychology and Counseling
IJEPC
EISSN : 0128-164X
Volume 10 Issue 61 (December 2025) PP. 1008-1022
DOI 10.35631/IJEPC.1061069

Ronan, K. R., & Johnston, D. M. (2005). *Promoting community resilience in disasters: The role for schools, youth, and families*. Springer US. https://doi.org/10.1007/b102725

Sanson†, A. V, van Hoorn, J., & Burke, S. E. L. (2019). Responding to the Impacts of the Climate Crisis on Children and Youth. *Child Development Perspectives*, *13*(4), 201–207. https://doi.org/10.1111/cdep.12342

Sapienza, J. K., & Masten, A. S. (2011). Understanding and promoting resilience in children and youth. *Current Opinion in Psychiatry*, *24*(4), 267–273. https://doi.org/10.1097/YCO.0b013e32834776a8

Seddighi, H., Yousefzadeh, S., López López, M., & Sajjadi, H. (2020). Preparing children for climate-related disasters. *BMJ Paediatrics Open*, *4*(1). https://doi.org/10.1136/bmjpo-2020-000833

Stanke, C., Murray, V., Amlôt, R., Nurse, J., & Williams, R. (2012). The effects of flooding on mental health: Outcomes and recommendations from a review of the literature. *PLoS Currents*. https://doi.org/10.1371/4f9f1fa9c3cae

Van Eck, N. J., & Waltman, L. (2007). Bibliometric mapping of the computational intelligence field. *International Journal of Uncertainty, Fuzziness and Knowldege-Based Systems*, *15*(5), 625–645. https://doi.org/10.1142/S0218488507004911

van Eck, N. J., & Waltman, L. (2010). Software survey: VOSviewer, a computer program for bibliometric mapping. *Scientometrics*, *84*(2), 523–538. https://doi.org/10.1007/s11192-009-0146-3

van Eck, N. J., & Waltman, L. (2017). Citation-based clustering of publications using CitNetExplorer and VOSviewer. *Scientometrics*, *111*(2), 1053–1070. https://doi.org/10.1007/s11192-017-2300-7

Verbeek, A., Debackere, K., Luwel, M., & Zimmermann, E. (2002). Measuring progress and evolution in science and technology - I: The multiple uses of bibliometric indicators. *International Journal of Management Reviews*, *4*(2), 179–211. https://doi.org/10.1111/1468-2370.00083

Wu, Y. C. J., & Wu, T. (2017). A decade of entrepreneurship education in the Asia Pacific for future directions in theory and practice. In *Management Decision* (Vol. 55, Issue 7, pp. 1333–1350). https://doi.org/10.1108/MD-05-2017-0518

Yu, X.-N., Lau, J. T. F., Mak, W. W. S., Zhang, J., & Lui, W. W. S. (2011). Factor structure and psychometric properties of the connor-davidson resilience scale among chinese adolescents. *Comprehensive Psychiatry*, *52*(2), 218–224. https://doi.org/10.1016/j.comppsych.2010.05.010

Zahri, R., Md Ali, A. H., Matsuura, S., & Rambat, S. (2025). Enhancing Youth Resilience in Disaster Risk Reduction: Insights from a systematic literature review. *Environment-Behaviour Proceedings Journal*, *10*(SI33), 63–70. https://doi.org/10.21834/e-bpj.v10isi33.7067

Zahri, R., Md Ali, A. H., Rambat, S., Ghazali, N. H., Ahmad, Y., & Hamzah, M. H. (2025). FLOOD EARLY WARNING SYSTEMS (FEWS) IN ENHANCING DISASTER RISK REDUCTION AND COMMUNITY RESILIENCE: A SYSTEMATIC REVIEW. *International Journal of Law, Government and Communication*, *10*(40), 425–445. https://doi.org/10.35631/ijlgc.1040031