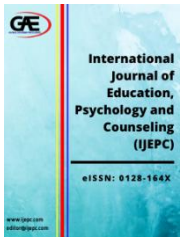
International Journal of Education, Psychology and Counseling
IJEPC
EISSN : 0128-164X
Volume 11 Issue 65 (December 2026) PP. 171-185



INTERNATIONAL JOURNAL OF EDUCATION, PSYCHOLOGY AND COUNSELLING (IJEPC)
https://gaexcellence.com/ijepc

PROFILING FLOOD-AFFECTED COMMUNITIES IN KUALA NERUS, TERENGGANU: SOCIODEMOGRAPHIC CHARACTERISTICS, REPEATED FLOOD EXPOSURE AND IMPLICATIONS FOR COMMUNITY RESILIENCE

Ali Salman[1]; Zuraidah Ali[2]*; Izzaamirah Ishak[3]*; Isma Rosila Ismail[4]; Zairihan Abdul Halim[5]; Wan Ahmad Amir Zal Wan Ismail[6]

[1]Faculty of Communication and Media Studies, Universiti Teknologi MARA, Malaysia
alisalman@uitm.edu.my https://orcid.org/0000-0001-5252-332X
[2]College of Continuing Education, Universiti Tenaga Nasional, Malaysia
zue@uniten.edu.my https://orcid.org/0000-0002-1376-2392
[3]UNITEN Business School, Universiti Tenaga Nasional, Malaysia
izza@uniten.edu.my https://orcid.org/0000-0002-7659-4031
[4]Department of Language and Communication, Universiti Malaysia Terengganu, Malaysia
ismarosila@umt.edu.my https://orcid.org/0000-0001-8290-3112
[5]Faculty of Business, Economics and Social Development, Universiti Malaysia Terengganu, Malaysia
zairihan@umt.edu.my https://orcid.org/0000-0003-0595-376X
[6]Faculty of Language Studies and Human Development, Universiti Malaysia Kelantan, Malaysia
waamirzal@umk.edu.my https://orcid.org/0000-0002-1096-436X
*Corresponding Authors

Article Info:

Article history:
Received date: 30.09.2026
Revised date: 15.10.2026
Accepted date: 05.11.2026
Published date: 01.12.2026

Abstract:

Flooding remains a recurring disaster in the East Coast of Peninsular Malaysia, affecting communities with diverse demographic, residential and exposure characteristics. This preliminary study aimed to profile flood-affected respondents in Kuala Nerus, Terengganu, based on sociodemographic characteristics, residential conditions and previous flood experience. A quantitative descriptive pilot study involving 35 flood-affected respondents was conducted using a researcher-developed printed questionnaire. Data were analyzed descriptively using frequencies and percentages in SPSS. The sample was predominantly female (82.9%), respondents aged 30–45 years formed the largest age group (57.1%), 57.1% had SPM-level education, 65.7% were homeowners and 68.6% lived in intermediate-cost housing. Most notably, 85.7% have experienced flooding at least twice. Repeated

International Journal of Education, Psychology and Counseling
IJEPC
EISSN : 0128-164X
Volume 11 Issue 65 (December 2026) PP. 171-185

To cite this document:

Salman, A., Ali, Z., Ishak, I., Ismail, I. R., Halim, Z. A., & Ismail, W. A. A. Z. W. (2026). Profiling Flood-Affected Communities in Kuala Nerus, Terengganu: Sociodemographic Characteristics, Repeated Flood Exposure and Implications for Community Resilience. *International Journal of Education, Psychology and Counselling, 11*(65), 171-185.

DOI: 10.35631/IJEPC.1165009

exposure may provide opportunities for experiential learning through which communities develop situated knowledge about risk, preparedness and response; however, experience alone should not be interpreted as evidence of resilience. From a psychosocial and community perspective, resilience depends on whether experiential knowledge can be supported by risk awareness, social resources, preparedness and adaptive capacity and translated into effective action. The study provides an initial empirical profile for larger-scale investigations of how flood experience interacts with learning, preparedness and community resilience.

Keyword:

Community Resilience; Flood Experience; Flood Vulnerability; Malaysia; Sociodemographic Profiling

© The authors (2026). This is an Open Access article distributed under the terms of the Creative Commons Attribution (CC BY NC) (http://creativecommons.org/licenses/by-nc/4.0/), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the original work is properly cited. For commercial re-use, please contact ijepc@gaexcllence.com.

Introduction

Floods are among the natural disasters that most frequently affect communities in Malaysia, particularly in the East Coast states of the Peninsula, which are exposed to heavy rainfall during the Northeast Monsoon. Although flood events are often discussed from physical perspectives such as rainfall distribution, drainage systems, and land-use changes their impact on society is not determined solely by the magnitude of the hazard. Vulnerability is also influenced by population characteristics, housing conditions, access to resources, and the capacity of individuals and communities to prepare for, respond to, and recover from disasters (Birkmann et al., 2013; Cutter et al., 2003; Isia et al., 2023a). Research in Malaysia further emphasizes that social vulnerability indicators must be tailored to the local context, as the significance of specific factors can vary depending on the community and the disaster environment.

This perspective is crucial in the context of the East Coast, where flooding is a recurring experience for some communities. Previous studies in Kelantan, Terengganu, and Pahang indicate that flood-affected communities possess varying capacities and resources for coping with and recovering from disasters. Community resilience extends beyond the mere ability to return to a pre-event state; it encompasses social networks, community resources, risk awareness, and the capacity to act in the face of threats (Amir Zal, 2018; Ludin et al., 2019; Norris et al., 2008). Meanwhile, research in Kuantan demonstrates that experiences of vulnerability and resilience must be understood through local conditions and the actual experiences of affected communities (Safiah Yusmah et al., 2020).

Kuala Nerus, Terengganu, provides a relevant context for such an examination. Recent research on spatial risks in Kuala Nerus and Kuala Terengganu indicates that these areas face various coastal and hydrometeorological hazards, including flooding and the impacts of heavy rainfall. Spatial assessments also reveal variations in exposure levels across different zones, underscoring the importance of understanding risk not only through the physical characteristics of an area but also through the profiles of the communities residing there (Bagheri et al., 2026). In disaster research, community profiling is a crucial initial step because the impacts of disasters are not experienced uniformly. Factors such as age, gender, education, home ownership status, and housing characteristics are frequently used to contextualize social vulnerability. However, the relationship between these factors and vulnerability is not necessarily linear. For instance, home ownership does not automatically equate to high adaptive capacity, just as higher levels of formal education do not automatically result in better disaster preparedness. Therefore, profile data should be interpreted as context for understanding vulnerability rather than as direct evidence of an individual's specific level of vulnerability or resilience (Cutter et al., 2003; Isia et al., 2023a, 2023b).

Another dimension requiring attention is prior experience with flooding. Such experience can provide knowledge regarding early warning signs, evacuation routes, property protection measures, and available forms of assistance. Qualitative studies in Malaysia suggest that experience can contribute to the learning and preparation process for future events, although these findings must be interpreted within the context of phenomenological research designs and small sample sizes (Suhaimi & Abdul Ghani, 2025). Nevertheless, experience cannot automatically be equated with resilience. Preparedness and adaptive capacity are complex constructs influenced by risk perception, resources, and the ability to translate knowledge into action (Kumaresen et al., 2025; Paton, 2003).

From psychosocial and community development perspectives, disaster experiences can be viewed as learning opportunities shaped by the interplay of personal experience, observation of others' actions, and social support. Knowledge derived from repeated experiences can help individuals interpret risk cues, evaluate courses of action, and build the confidence needed to prepare. However, this process is not automatic; experience only contributes meaningfully to preparedness when the knowledge gained is supported by communication, resources, and social networks, and subsequently translated into appropriate action. Thus, profiling flood experiences offers a starting point for understanding not only who is vulnerable but also the learning contexts and psychosocial capacities that can be explored in greater depth within resilience studies.

Based on these requirements, this preliminary study aims to profile flood-affected respondents in Kuala Nerus, Terengganu, regarding their sociodemographic characteristics, housing conditions, and past flood experiences. This study does not aim to directly measure community resilience or test cause-and-effect relationships. Instead, the initial profiling serves to provide an empirical overview of the community context, which can form the basis for larger-scale studies on vulnerability, preparedness, and community resilience.

Accordingly, this study addresses a key question: What are the sociodemographic characteristics, housing conditions, and flood exposure levels among flood-affected respondents in Kuala Nerus, Terengganu?

International Journal of Education, Psychology and Counseling
IJEPC
EISSN : 0128-164X
Volume 11 Issue 65 (December 2026) PP. 171-185

Literature Review

Literature on flood disasters indicates that understanding affected communities requires attention not only to sociodemographic and housing characteristics but also to experiences of repeated flood exposure, which can shape community preparedness and resilience.

Social Vulnerability in Flood-Affected Communities

Flood vulnerability depends on more than just an individual's physical location relative to hazard zones. The concept of social vulnerability emphasizes that individual, household, and community characteristics can influence the capacity to anticipate, cope with, and recover from disruptions. Frameworks regarding social vulnerability and community resilience have long highlighted the interplay between exposure, resources, adaptive capacity, and societal characteristics in determining the impact of a disaster (Birkmann et al., 2013; Cutter et al., 2003, 2008).

In the Malaysian context, Isia et al. (2023a) identified demographic characteristics, socioeconomic status, access to healthcare, risk perception, and coping capacity as factors frequently used to understand social vulnerability to floods. Their study also demonstrated that indicators such as age, gender, education, property ownership, and housing conditions are relevant to vulnerability assessments, though their effects are context dependent. An assessment of areas in Sarawak by Isia et al. (2023b) also highlights the multidimensional nature of social vulnerability and the need to consider physical exposure alongside community capacity.

This implies that demographic characteristics should not be interpreted in a mechanical manner. For instance, a predominance of female respondents in a study does not warrant the conclusion that women are universally more vulnerable. The same applies to age; while certain groups may have specific needs during disasters, the impact of age interacts with health, resources, experience, and support networks. Recent research in Hulu Langat demonstrates that vulnerability factors such as age, health, and disaster education exhibit varying relationships with resilience components like connectedness, risk awareness, action planning, and resources (Wan Mohammad Azhar et al., 2026).

Consequently, community profiling does not help to categorize who is resilient or vulnerable, but rather to identify the heterogeneity that must be taken into account in disaster management. This principle is crucial for preliminary studies, as descriptive profiles establish the necessary context before the relationships between community characteristics, psychosocial constructs, and adaptive capacity are tested in subsequent research.

Sociodemographic and Residential Dimensions in the Context of Floods

Residential characteristics form part of the living context that shape an individual's experience of a disaster. Home ownership status, housing type, and length of residence can provide information regarding residential stability and the level of an individual's attachment to a place. Literature on social vulnerability includes property ownership and housing characteristics as relevant indicators, although their interpretation must take local conditions into account (Cutter et al., 2003; Isia et al., 2023a).

International Journal of Education, Psychology and Counseling
IJEPC
EISSN : 0128-164X
Volume 11 Issue 65 (December 2026) PP. 171-185

Home ownership, for instance, can provide residential stability but does not necessarily protect households from flood risks. Homeowners may possess a stronger attachment to their residential area and a greater tendency to remain in a specific location, yet they also face direct losses when their homes and belongings are exposed to floods. Literature on place attachment indicates that length of residence and home ownership can be linked to community attachment and local participation (Brown et al., 2003; DiPasquale & Glaeser, 1999; Lewicka, 2011). However, such relationships do not directly demonstrate disaster resilience.

Evidence from flood-prone communities in Malaysia also highlights the importance of the housing context. In a study of flood victims in Kelantan, Ludin et al. (2019) found that residential characteristics were among the factors linked to various aspects of community disaster resilience. Meanwhile, a study in Kuantan by Safiah Yusmah et al. (2020) demonstrated that experiences of vulnerability and resilience cannot be separated from the community's actual living conditions. Therefore, in the current study, housing type and home ownership are used as profiling characteristics rather than as direct proxies for economic status or levels of resilience.

Length of residence also provides context for the experience of risk. Individuals who have lived in hazard-prone areas for longer periods may possess greater knowledge regarding flood history, flood-prone zones, or community emergency responses. However, long-term residency also implies prolonged exposure to risk. Consequently, residential stability and hazard exposure can coexist. For this reason, residential data is better suited for understanding the respondents' context than for making assumptions about their capacity to cope with disasters.

Flood Experience, Learning, and Community Resilience

The experience of facing a disaster serves as a source of learning that can influence risk perceptions and behaviours. Paton (2003) explains that preparedness is not merely the result of awareness regarding the existence of a hazard; it also involves cognitive and social processes that motivate individuals to act. In a community context, resilience encompasses a broader network of capacities such as resources, social support, communication, and the ability to adapt (Cutter et al., 2008; Norris et al., 2008).

An experiential learning perspective helps explain why past experiences are potentially relevant to preparedness, without if exposure alone automatically fosters resilience. In the context of flood risk reduction, experiential learning involves interpreting events, evaluating existing practices, and adjusting actions based on real-world experiences (Cook et al., 2025). At the community level, this process is also social in nature, as knowledge regarding risks and responses can be shaped through the sharing of experiences, interactions with neighbors, and engagement with local institutions. Consequently, the value of an experience lies not merely in the frequency of events, but in the extent to which that experience is transformed into actionable knowledge for preparedness and response.

Evidence from Malaysia reveals similarly complex relationships. A phenomenological study involving two victims of recurring floods in Jitra indicates that past experiences can contribute to the learning and preparation processes for future events, although these findings must be interpreted with the caveat of a very small sample size (Suhaimi & Abdul Ghani, 2025). In a larger urban study, Kumaresen et al. (2025) distinguish between risk perception, flood

International Journal of Education, Psychology and Counseling
IJEPC
EISSN : 0128-164X
Volume 11 Issue 65 (December 2026) PP. 171-185

preparedness, and adaptive capacity, identifying them as interconnected yet distinct dimensions.

Research conducted on the East Coast also demonstrates that resilience stems from capacities that extend well beyond mere experience. Amir Zal (2018) highlights the importance of community capitals in understanding the resilience of flood victims in Pahang, Terengganu, and Kelantan, while a study in Kemaman emphasizes community adaptation processes in the face of recurring floods (Ernawati et al., 2025).

Consequently, repeated experiences can give rise to two conditions that are not necessarily contradictory: learning from experience and continued exposure to hazards. An individual might know what needs to be done yet lack the resources to carry it out. Conversely, someone experiencing a flood for the first time might have access to information, warnings, and assistance that enable effective preparation. For this reason, the number of flood experiences in the current study is interpreted as an indicator of prior exposure rather than a direct measure of resilience.

Methodology

This study employs a quantitative cross-sectional design to generate a preliminary profile of flood-affected respondents. The data analyzed originates from a pilot study conducted prior to the implementation of a larger-scale study. A pilot study enables researchers to assess the suitability of instruments and data collection procedures, as well as to identify initial data patterns before the main study is carried out (Hertzog, 2008). Consistent with the article's objectives, the analysis focuses solely on the respondents' sociodemographic characteristics, housing details, and flood experiences, without aiming to test causal relationships.

Study Design and Location

The study was conducted as a cross-sectional pilot study in Kuala Nerus, Terengganu. This design allows for the collection of respondent information within a single data collection period, providing a descriptive overview of the characteristics of the community under study. The study was not designed to generate population estimates for the entire state of Terengganu or the East Coast of Peninsular Malaysia. Instead, it offers a preliminary snapshot of respondent characteristics at the study site, serving as a foundation for future research.

Respondents and Recruitment Procedure

A total of 35 flood-affected respondents from Kuala Nerus participated in the analysis presented in this article. Respondents were identified using purposive sampling, focusing on residents in flood-affected areas who had direct experience with the event. The sample comprised both men and women across various age groups and educational backgrounds.

Initially, the researchers obtained information regarding the area and community from state government offices. Subsequently, the researchers contacted and met in person with the village head (penghulu) to secure permission to approach the affected villagers. Once access to the community was granted, the research team met directly with residents who had experienced flooding to conduct data collection.

International Journal of Education, Psychology and Counseling
IJEPC
EISSN : 0128-164X
Volume 11 Issue 65 (December 2026) PP. 171-185

Research Instrument

Data were collected using a structured questionnaire developed by the researchers and provided in printed format. The broader pilot study instrument comprised several sections concerning flood experiences and the community. However, in line with the objectives of this article, the analysis utilized only variables related to respondent profiling: sociodemographic characteristics, housing characteristics, and prior flood experiences.

Sociodemographic characteristics included gender, age, and educational background. Housing characteristics covered home ownership status, housing type, and the duration of residence in the area. Flood exposure was determined based on the number of flood events experienced by the respondents. These variables were used to construct a descriptive profile and were not considered direct measures of learning, preparedness, or community resilience.

Data Collection Procedure

Data collection was conducted over a two-week period. After gaining access to the community through the village head (penghulu), the researchers met with respondents face-to-face. Respondent consent was obtained prior to questionnaire administration. For respondents under the age of 18, consent was obtained from parents or guardians before their participation in the study.

Generally, respondents completed the printed questionnaires themselves. For respondents who faced difficulties with reading or writing, the researchers helped by reading out the items and recording the answers exactly as provided. This approach enabled participation by individuals with varying levels of literacy without altering the content of their responses.

Data Analysis

Data was analyzed using SPSS. As the study's objective was to generate an initial profile, the analysis was limited to descriptive statistics in the form of frequencies (n) and percentages (%). Certain age and residency duration values were grouped into broader categories to facilitate presentation, without altering the respondents' original values. No inferential analysis was used to test the relationships between the variables. Therefore, the findings are not used to determine causal relationships or to conclude that a specific characteristic causes vulnerability or resilience.

Research Findings

The analysis involved 35 flood-affected respondents in Kuala Nerus. The findings are organized into three main dimensions: sociodemographic characteristics, housing characteristics, and flood exposure experiences.

Sociodemographic Characteristics

Female respondents constituted most of the sample, numbering 29 (82.9%), compared to six male respondents (17.1%). In terms of age, the largest group was the 30–45 age bracket, comprising 20 respondents (57.1%). Six respondents (17.1%) were aged 46 and above, five (14.3%) were aged 17 and below, while four (11.4%) fell into the 18–29 age group.

International Journal of Education, Psychology and Counseling
IJEPC
EISSN : 0128-164X
Volume 11 Issue 65 (December 2026) PP. 171-185

Regarding education, 20 respondents (57.1%) held an SPM-level education, seven (20.0%) reported having college-level education, and six (17.1%) had university-level education. Two respondents (5.7%) were categorized as “Others”.

Table 1. Socio-demographic Profile of Respondents (N = 35)

Characteristic	Category	n	%
Gender	Male	6	17.1
	Female	29	82.9
Age	≤17 years	5	14.3
	18–29 years	4	11.4
	30–45 years	20	57.1
	≥46 years	6	17.1
Educational background	SPM	20	57.1
	College	7	20.0
	University	6	17.1
	Others	2	5.7

Housing Characteristics

Most respondents were homeowners (23 individuals or 65.7%), while 11 (31.4%) lived in rented homes, and one case (2.9%) had an unknown ownership status. Regarding housing type, 24 respondents (68.6%) lived in intermediate-cost housing, seven (20.0%) in low-cost housing, and four (11.4%) in high-cost housing.

The duration of residence showed greater variation. Five respondents (14.3%) were recorded as "0 years," 23 (65.7%) fell within the 2 to 9-year range, and seven (20.0%) had lived there for at least 10 years.

Table 2. Residential Characteristics of Respondents (N = 35)

Characteristic	Category	n	%
Home ownership	Homeowner	23	65.7
	Rented accommodation	11	31.4
	Status unknown	1	2.9
Housing type	Low-cost house	7	20.0
	Intermediate-cost house	24	68.6
	High-cost house	4	11.4
Length of residence	0 years*	5	14.3
	2–9 years	23	65.7
	≥10 years	7	20.0

Note. The category “0 years” is retained as recorded in the original data and is not further interpreted.

International Journal of Education, Psychology and Counseling
IJEPC
EISSN : 0128-164X
Volume 11 Issue 65 (December 2026) PP. 171-185

Experience of Flood Exposure

Flood experiences reveal a clear pattern of repeated exposure. A total of 21 respondents (60.0%) experienced two flood events. Four respondents (11.4%) reported three experiences, three (8.6%) reported four experiences, one (2.9%) reported five experiences, and another (2.9%) reported 10 experiences. Only four respondents (11.4%) reported a single experience, and one (2.9%) had never experienced a flood.

Table 3. Previous Flood Experience of Respondents (N = 35)

Number of Flood Experience	n	%
0	1	2.9
1	4	11.4
2	21	60.0
3	4	11.4
4	3	8.6
5	1	2.9
10	1	2.9
Total	35	100.0

Overall, 30 out of 35 respondents (85.7%) experienced flooding at least twice. This represents the most prominent descriptive pattern in the study.

Summary of Respondent Profile

Three key patterns were identified. First, the sample was dominated by female respondents and the 30 to 45 age group, with the SPM qualification being the most common educational background. Second, many respondents were homeowners who resided in intermediate-cost housing. Third, exposure to recurring floods was a distinct characteristic, with more than four-fifths of respondents having experienced at least two such events. These patterns describe the sample context and do not, in themselves, demonstrate levels of vulnerability or resilience. The implications are discussed subsequently.

Discussion

The findings provide an initial understanding of how sociodemographic and residential characteristics, together with repeated flood exposure, shape the broader context to better understand community vulnerability and resilience.

Sociodemographic Characteristics as a Context for Vulnerability

The study profile reveals a predominance of female respondents and individuals aged 30 to 45. This composition should be interpreted as a characteristic of the sample rather than evidence that women or this specific age group possess a particular level of vulnerability. Literature indicates that the impact of demographic characteristics on vulnerability depends on interactions with other factors such as resources, health, education, social networks, and local conditions (Cutter et al., 2003; Isia et al., 2023a; Wan Mohammad Azhar et al., 2026).

International Journal of Education, Psychology and Counseling
IJEPC
EISSN : 0128-164X
Volume 11 Issue 65 (December 2026) PP. 171-185

Similarly, the prevalence of SPM-level education within the sample cannot be viewed as an indicator of preparedness levels. Formal education and disaster education are distinct concepts. The Hulu Langat study, for instance, highlights the importance of disaster education for various components of resilience; however, this does not imply that academic qualifications alone determine an individual's capacity to cope with floods (Wan Mohammad Azhar et al., 2026).

Therefore, the primary contribution of the study's sociodemographic profile is to provide context regarding the population represented in the data. In future studies, these characteristics could be analyzed alongside measures of preparedness, risk perception, and adaptive capacity to determine whether more systematic patterns of relationships exist.

Housing, Residential Stability, and Vulnerability

Many respondents own their homes and reside in intermediate-cost housing. Although homeownership is often associated with residential stability, these findings do not warrant the conclusion that most respondents possess low vulnerability. In the context of disasters, owner-occupied homes can still be situated in high-risk areas and suffer recurring damage.

Studies on social vulnerability in Malaysia indicate that property ownership and housing characteristics are relevant to understanding vulnerability but must be interpreted in conjunction with physical exposure and community capacity (Isia et al., 2023a, 2023b). A study of flood-prone communities in Kelantan also found that housing characteristics can be linked to dimensions of community disaster resilience (Ludin et al., 2019).

The duration of residence also requires careful interpretation. Most respondents had lived in the area for between two and nine years, while one-fifth had resided there for at least a decade. A longer period of residence potentially fosters local knowledge and community networks, consistent with literature on place attachment (Brown et al., 2003; Lewicka, 2011). However, in flood-prone areas, residential stability can also imply continuous exposure; thus, residential stability and flood exposure are not mutually exclusive.

Recurrent Flood Exposure as a Key Pattern

The most significant finding is that 85.7% of respondents have experienced flooding at least twice. This pattern indicates that for most respondents, flooding is not a singular event, but an occurrence faced repeatedly.

Such experiences hold the potential to serve as a source of experiential learning. Flood victims can learn to recognize changing conditions, safeguard documents and property, make early preparations, or seek assistance based on past experiences. A phenomenological study by Suhaimi and Abdul Ghani (2025) suggests that prior experience can form part of the learning and preparedness process, although findings from their two respondents should not be generalized. On a broader scale, Kumaresen et al. (2025) demonstrate the interrelationship between risk perception, preparedness, and adaptive capacity within the context of flooding in Malaysia.

From learning and psychosocial perspectives, this pattern is significant because repeated experiences offer opportunities for reflection, the development of situational knowledge, and behavioral adjustment. Cook et al. (2025) emphasize that experiential learning in flood risk

International Journal of Education, Psychology and Counseling
IJEPC
EISSN : 0128-164X
Volume 11 Issue 65 (December 2026) PP. 171-185
reduction is linked to how experiences and practices are translated into change. In the present study, the data merely confirms the level of repeated exposure; they do not measure whether respondents learned, gained confidence in facing floods, or altered their preparedness behaviors. This distinction is crucial to ensure that the potential for learning is not misinterpreted as proven psychological outcomes or established resilience.

However, repeated exposure is not equivalent to resilience. Individuals may face floods repeatedly yet still lack the financial resources, support systems, information, or capacity to mitigate losses. Conversely, repeated exposure may simply result from an individual continuing to reside in a hazard-prone location. The resilience perspective emphasizes that the capacity to cope with and recover from disasters involves social resources and processes that extend far beyond mere experience (Cutter et al., 2008; Norris et al., 2008).

Studies conducted on the East Coast reinforce this interpretation. Amir Zal (2018) demonstrates that community resilience is linked to various forms of community capital, while a study in Kemaman highlights the importance of adaptive capacity among communities facing floods (Ernawati et al., 2025).

From Profiling to Understanding Community Resilience

This preliminary study demonstrates the value of profiling as a starting point for resilience research. Understanding who is exposed to, their living conditions, and the extent of their past experiences enables subsequent studies to develop more accurate measures of preparedness and adaptive capacity.

In the context of Kuala Nerus, this is increasingly relevant, as recent spatial studies indicate varying levels of exposure to flood risks and coastal hazards across the Kuala Nerus and Kuala Terengganu areas (Bagheri et al., 2026). By integrating such physical data with community profiles, future research can shift from the question "who is exposed?" to "how does the experience of exposure translate into preparedness and action?"

This framing also opens the door to psychosocial approaches and community education within disaster management. Residents' experiences can serve as a foundation for community reflection, local knowledge sharing, and preparedness education that links real-life experiences to actions taken prior to future events. Such support has the potential to help communities transform experiential knowledge into risk awareness, collective self-efficacy, and preparatory actions; however, these constructs must be specifically measured before any conclusions regarding their impact can be drawn.

Consequently, larger-scale studies need to measure, at a minimum, risk perception, disaster knowledge, preparedness, social support, access to resources, and community resilience. Such an approach allows flood experience to be examined as a potential contributor to learning, without if the experience itself equates to resilience.6.0 Implications and Limitations of the Study

This study has two main implications. First, profiling flood-affected communities must go beyond merely identifying the location of the events. Sociodemographic and housing characteristics provide context that helps researchers and disaster managers understand that residents in flood-prone areas do not constitute a homogeneous group. Variations in age,

education, home ownership status, and length of residence can result in differing communication and support needs.

Second, the high rate of repeated exposure suggests the potential existence of experiential knowledge within the community. While this knowledge can serve as a resource for community-based preparedness programs, it needs to be translated into concrete actions. Research on flood warnings in Kelantan indicates that the effectiveness of information depends not only on the issuance of a warning but also on how the information reaches the community and how the public responds to it (Alias et al., 2020).

However, the study has several limitations. The sample size was limited to 35 respondents, and data were collected in Kuala Nerus; therefore, the findings cannot be generalized to the whole of Terengganu or the East Coast of Malaysia. The sample composition was also gender-imbalanced, with 82.9% of respondents being female.

More importantly, the study is descriptive in nature. It did not directly measure resilience nor conduct inferential analysis to determine the relationship between respondent characteristics and preparedness or resilience. Furthermore, the number of flood experiences does not account for the magnitude of the events, the damage sustained, the recovery period, or behavioral changes following each event.

Conclusion

This preliminary study profiled 35 flood-affected respondents in Kuala Nerus, Terengganu, based on sociodemographic characteristics, housing details, and flood experiences. The sample was dominated by women, the 30 to 45 age group, and respondents with an SPM level of education. The majority owned their homes and resided in intermediate-cost housing. However, the most prominent pattern is the experience of floods recurring. A total of 85.7% of respondents had experienced flooding at least twice, indicating that repeated exposure is a significant aspect of the life context for most respondents.

These findings do not imply that repeated experience automatically fosters resilience. Instead, experience provides an opportunity to build knowledge and facilitate learning, which must subsequently be translated into preparedness, adaptive capacity, and action. This distinction is crucial because resilience emerges from the interaction between individuals, resources, social networks, institutions, and local conditions, rather than simply the number of disasters experienced.

As a pilot study, the article's primary contribution lies in establishing an empirical profile that can serve as a foundation for larger-scale research. Future studies could link flood experience with risk perception, preparedness, disaster knowledge, social support, and community resilience using more comprehensive instruments and larger samples.

Thus, community profiling is not the endpoint of disaster analysis but an initial step toward understanding how experience and life context can shape the capacity to manage future risks. Experience offers opportunities for learning; resilience depends on the ability to translate that learning into preparation, adaptation, and action.

International Journal of Education, Psychology and Counseling
IJEPC
EISSN : 0128-164X
Volume 11 Issue 65 (December 2026) PP. 171-185

Acknowledgements: The authors would like to express their sincere gratitude to Universiti Tenaga Nasional, Universiti Malaysia Terengganu, Universiti Malaysia Kelantan and Universiti Teknologi MARA for providing the necessary resources and support throughout the course of this research. Special appreciation is extended to colleagues and peers who contributed valuable insights and constructive feedback, which greatly enhanced the quality of this paper.

Funding Statement: This research received financial support from the Ministry of Education under Grant Number 202501MONSUN. The funding body had no role in the design of the study, data collection, analysis, interpretation of results, or the decision to publish this manuscript.

Conflict of Interest Statement: The authors declare that there is no conflict of interest regarding the publication of this paper. All authors have contributed to this work and approved the final version of the manuscript for submission to the International Journal of Education, Psychology and Counseling (IJEPC).

Ethics Statement: The authors confirm that the research was conducted in accordance with accepted academic integrity and ethical publishing standards.

Author Contribution Statement: All authors contributed significantly to the development of this manuscript. The corresponding author was responsible for the conceptualization, methodology, and overall supervision of the study. Authors 1, 4 and 5 handled data collection Authors 1, 2 and 3 contributed to the literature review, drafting, and critical revision of the manuscript. All authors handled analysis, interpretation of results, and approved the final version of the manuscript prior to submission.

References

Alias, N. E., Salim, N. A., Taib, S. M., Mohd Yusof, M. B., Saari, R., Ramli, M. W. A., Othman, I. K., Annammala, K. V., Yusof, H. M., Ismail, N., Yuzir, A., & Blenkinsop, S. (2020). Community responses on effective flood dissemination warnings—A case study of the December 2014 Kelantan flood, Malaysia. Journal of Flood Risk Management, 13(S1), e12552. https://doi.org/10.1111/jfr3.12552

Amir Zal, W. A. (2018). Ketahanan komuniti mangsa bencana banjir di Pantai Timur Semenanjung Malaysia dalam konteks modal komuniti [Community resilience among flood victims in the East Coast of Peninsular Malaysia in the context of community capitals]. Journal of Nusantara Studies, 3(2), 41–53. https://doi.org/10.24200/jonus.vol3iss2pp41-53

Bagheri, M., Wan Talaat, W. I. A., & Mohd Akhir, M. F. (2026). Strategic master plan for coastal city risk mitigation: A case study of Kuala Nerus and Kuala Terengganu, Malaysia. Natural Hazards, 122, Article 159. https://doi.org/10.1007/s11069-025-07798-9

Birkmann, J., Cardona, O. D., Carreño, M. L., Barbat, A. H., Pelling, M., Schneiderbauer, S., Kienberger, S., Keiler, M., Alexander, D., Zeil, P., & Welle, T. (2013). Framing vulnerability, risk and societal responses: The MOVE framework. Natural Hazards, 67(2), 193–211. https://doi.org/10.1007/s11069-013-0558-5

Brown, B. B., Perkins, D. D., & Brown, G. (2003). Place attachment in a revitalizing neighborhood: Individual and block levels of analysis. Journal of Environmental Psychology, 23(3), 259–271. https://doi.org/10.1016/S0272-4944(02)00117-2

Cook, B. R., Cornes, I., Satizábal, P., & de Lourdes Melo Zurita, M. (2025). Experiential learning, practices, and space for change: The institutional preconfiguration of community participation in flood risk reduction. Journal of Flood Risk Management, 18(1), e12861. https://doi.org/10.1111/jfr3.12861

Cutter, S. L., Barnes, L., Berry, M., Burton, C., Evans, E., Tate, E., & Webb, J. (2008). A place-based model for understanding community resilience to natural disasters. Global Environmental Change, 18(4), 598–606. https://doi.org/10.1016/j.gloenvcha.2008.07.013

Cutter, S. L., Boruff, B. J., & Shirley, W. L. (2003). Social vulnerability to environmental hazards. Social Science Quarterly, 84(2), 242–261. https://doi.org/10.1111/1540-6237.8402002

DiPasquale, D., & Glaeser, E. L. (1999). Incentives and social capital: Are homeowners better citizens? Journal of Urban Economics, 45(2), 354–384. https://doi.org/10.1006/juec.1998.2098

Ernawati, E., Yulfa, A., Rahmi, L., & Ibrahim, M. H. (2025). Resilient communities: Adapting to flood disasters in Kemaman, Terengganu, Malaysia and Padang City, Indonesia. Environmental Research, Engineering and Management, 81(3), 63–72. https://doi.org/10.5755/j01.erem.81.3.39073

Hertzog, M. A. (2008). Considerations in determining sample size for pilot studies. Research in Nursing & Health, 31(2), 180–191. https://doi.org/10.1002/nur.20247

Isia, I., Hadibarata, T., Hapsari, R. I., Jusoh, M. N. H., Bhattacharjya, R. K., & Shahedan, N. F. (2023b). Assessing social vulnerability to flood hazards: A case study of Sarawak's divisions. International Journal of Disaster Risk Reduction, 97, 104052. https://doi.org/10.1016/j.ijdrr.2023.104052

Isia, I., Hadibarata, T., Jusoh, M. N. H., Bhattacharjya, R. K., Shahedan, N. F., Fitriyani, N. L., & Syafrudin, M. (2023a). Identifying factors to develop and validate social

vulnerability to floods in Malaysia: A systematic review study. Sustainability, 15(17), 12729. https://doi.org/10.3390/su151712729

Kumaresen, M., Teo, F. Y., Selvarajoo, A., Sivapalan, S., & Falconer, R. A. (2025). Assessing community perception, preparedness, and adaptation to urban flood risks in Malaysia. Water, 17(15), 2323. https://doi.org/10.3390/w17152323

Lewicka, M. (2011). Place attachment: How far have we come in the last 40 years? Journal of Environmental Psychology, 31(3), 207–230. https://doi.org/10.1016/j.jenvp.2010.10.001

Ludin, S. M., Rohaizat, M., & Arbon, P. (2019). The association between social cohesion and community disaster resilience: A cross-sectional study. Health & Social Care in the Community, 27(3), 621–631. https://doi.org/10.1111/hsc.12674

Norris, F. H., Stevens, S. P., Pfefferbaum, B., Wyche, K. F., & Pfefferbaum, R. L. (2008). Community resilience as a metaphor, theory, set of capacities, and strategy for disaster readiness. American Journal of Community Psychology, 41(1–2), 127–150. https://doi.org/10.1007/s10464-007-9156-6

Paton, D. (2003). Disaster preparedness: A social-cognitive perspective. Disaster Prevention and Management: An International Journal, 12(3), 210–216. https://doi.org/10.1108/09653560310480686

Safiah Yusmah, M. Y., Bracken, L. J., Sahdan, Z., Norhaslina, H., Melasutra, M. D., Ghaffarianhoseini, A., Sumiliana, S., & Shereen Farisha, A. S. (2020). Understanding urban flood vulnerability and resilience: A case study of Kuantan, Pahang, Malaysia. Natural Hazards, 101(2), 551–571. https://doi.org/10.1007/s11069-020-03885-1

Suhaimi, M. F., & Abdul Ghani, M. T. (2025). Emotional resilience and experiences of flood victims in Jitra, Kedah: A phenomenological approach. Journal of Asian Geography, 4(1), 44–53. https://doi.org/10.36777/jag2025.4.1.6

Wan Mohammad Azhar, W. A. A., See Too, K. L., & Muhamad, N. (2026). Social vulnerability and community resilience in Hulu Langat flood-prone area, Selangor. Journal of Safety Science and Resilience, 7(3), 100291. https://doi.org/10.1016/j.jnlssr.2026.100291