

Place Attachment Among Older Adult Survivors of the Galodo Natural Disaster in Nagari Pandai Sikek: A Phenomenological Study

Pengalaman Place Attachment pada Lansia Penyintas Bencana Alam Galodo Nagari Pandai Sikek

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ABSTRACT

This study explored place attachment among older adult survivors of the Galodo natural disaster in Nagari Pandai Sikek. The study focused on how participants interpreted their relationship with their place of residence after the disaster. A qualitative phenomenological design was used to examine these experiences in depth. Three older adult survivors were selected through purposive sampling. Data were collected through semi-structured interviews and analyzed using Interpretative Phenomenological Analysis. The analysis identified four main themes of place attachment: associating the home with personal identity, protecting the home, experiencing comfort within the home, and maintaining bonds with the social environment. These findings show that place attachment among older adult disaster survivors reflects a deep connection with the physical, social, and communal dimensions of home. For these survivors, the home represents not only a place of residence but also a central part of personal identity and continuity after disaster.

Keywords: natural disaster; place attachment; lived experiences; older adult survivors; phenomenological

INTRODUCTION

In 2024, West Sumatra experienced a major natural disaster locally known as *galodo*. Among the Minangkabau people, *galodo* refers to a sudden flood that carries solid materials such as mud, rocks, and debris. This disaster occurred on May 11, 2024, and affected several areas in West Sumatra, including Agam Regency, Tanah Datar Regency, and Padang Panjang City (BNPB, 2024). Nagari Pandai Sikek was among the most severely affected areas. The disaster caused substantial physical, material, and psychological consequences for the local community. According to the village chief of Nagari Pandai Sikek, the disaster caused seven deaths, while one person remains missing.

The *galodo* disaster also caused significant material losses. At least nine houses and shops were destroyed. Thirteen houses

sustained moderate damage, and six houses sustained minor damage. The disaster also damaged private buildings, public facilities, fishponds, a mosque, and agricultural land owned by residents. The disaster further affected residents' psychological well-being. Several residents reported gastrointestinal discomfort, anxiety during prolonged rainfall, sleep disturbance, fear of darkness, and recurrent dreams related to the *galodo* event.

Older adults represent one of the most vulnerable groups in natural disasters. Jia et al. (2010) found that older adults are more susceptible to post-traumatic stress disorder and general psychological disorders than younger adults. Older adults also face physical limitations that may hinder evacuation, recovery, and adaptation after disasters. In addition, older adults may lose family members who provide essential emotional and practical support during recovery. Even when older



adults survive a disaster, they often continue to depend on assistance from family members and relatives (Yotsui *et al.*, 2016). Older adults also tend to rely on established routines and stable patterns of activity within their homes. Therefore, disruptions to daily routines caused by natural disasters may have a greater impact on older adults than on younger age groups (Yotsui *et al.*, 2016).

An initial survey was conducted with 14 older adult survivors of the *galodo* disaster in Nagari Pandai Sikek. The survey included questions about possible relocation after the disaster. All respondents expressed reluctance to move from their current place of residence. They reported several reasons for this reluctance, including an inability to leave their homes and possessions, concern about separation from relatives and neighbors, and difficulty imagining another place that could provide the same level of comfort. Lewis and Buffel (2020) indicate that social relationships within the community strongly influence older adults' ability to age in place. These findings suggest that older adults may resist relocation because they seek to preserve life continuity, residential familiarity, and long-standing social relationships.

Sun *et al.* (2018) argue that older adults often remain near their long-term residences because they feel attached to their homes. This attachment refers to a strong sense of closeness and connection to the home as an important and meaningful place. Cheng *et al.* (2021) further explain that this attachment involves perceptions of the home as meaningful, comfortable, secure, supportive of daily activities, continuous with life history, and connected to social relationships that foster a sense of community. These perspectives indicate that older adults may experience strong place attachment to their homes and surrounding environments.

Place attachment refers to the cognitive and emotional bond that individuals develop toward a place. This concept includes three interrelated dimensions: person, psychological process, and place (Scannell & Gifford, 2010).

Scannell and Gifford (2014) further explain that place attachment emerges from meanings derived from individual and collective experiences. Individuals perceive, process, and express these meanings through affective, cognitive, and behavioral responses to places that hold physical and social significance.

Place attachment constitutes an important dimension of aging among older adults (Sun *et al.*, 2022). The living environment shapes how older adults experience aging in daily life. Place attachment helps older adults adapt to declining physical and spatial abilities. It also functions as a secure base that supports psychological well-being (Fornara *et al.*, 2019). Long-term residence in a particular home may also foster a sense of identity because the home becomes integrated into the individual's personal narrative (Sun *et al.*, 2022). Older adults often describe their sense of self as developing alongside their homes, even when the surrounding environment changes over time (Lewis & Buffel, 2020).

Place attachment is closely related to older adults' life satisfaction in their place of residence. Rollero and De Piccoli (2010) argue that individuals who develop positive emotional bonds with their city or community experience higher levels of happiness. Tlili and Amara (2016) similarly found that individuals who develop attachment to their residential area report greater life satisfaction. Place attachment may enhance older adults' happiness and well-being because the living environment functions not only as a physical setting but also as a source of self-identity, life meaning, experiential continuity, social support, and security. These functions allow older adults to sustain psychological well-being and experience aging more positively (Sun *et al.*, 2022; Cheng *et al.*, 2021; Afshar *et al.*, 2017).

Place attachment is also shaped by the social and cultural contexts in which older adults live. For older adults, the home is not merely a physical dwelling. The home also serves as a source of identity, a repository of memories, a setting for social relationships, and a reflection of long-held cultural values.

The *galodo* disaster provides a critical context for examining how older adults interpret and sustain attachment to place after environmental disruption. When disasters threaten older adults' connection to their homes, key dimensions of place attachment may become more visible. These dimensions include belonging, life continuity, community ties, and attachment to local cultural values. The experiences of older adult survivors therefore provide valuable insight into how place attachment is formed, maintained, and understood in later life.

Older adults possess extensive knowledge of local culture, community history, and the surrounding environment. This accumulated knowledge may strengthen their attachment to their place of residence. Bailey et al. (2012) reported that older adults demonstrate higher levels of place attachment than other age groups. Older adults may also shape how younger generations understand local communities. Through everyday interaction, they transmit meanings, memories, and values associated with their living environment. Therefore, place attachment among older adults merits further scholarly investigation.

Research on place attachment has expanded across diverse environmental and social contexts. Several studies have examined place attachment among older adults living in residential homes (Arani et al., 2021; Sun et al., 2024; Haryani et al., 2021). Other studies have investigated place attachment in tourism and cultural heritage contexts, with particular attention to tourist experiences and cultural values (Kennedy, 2023; Karima, 2023). Research in Glagaharjo Village, a community exposed to Mount Merapi eruptions, has also documented residents' decisions to remain in high-risk zones and resist relocation after eruptions (Depari, 2023). Although these studies have advanced understanding of place attachment, most existing research focuses on tourism settings, public spaces, residential areas, and general communities. Limited

research has examined place attachment among older adult survivors of natural disasters.

Previous studies have established place attachment as an important phenomenon in later life. However, much of this research has used quantitative methods to measure the degree of attachment and examine relationships among variables. These approaches provide valuable information about factors associated with place attachment. However, they do not fully capture the subjective meanings and complex dynamics through which older adults experience attachment to disaster-affected homes. Qualitative research is therefore necessary to explore how older adult survivors interpret their homes after natural disasters. Such an approach can generate a deeper understanding of place attachment among older adults whose homes and communities have been affected by the *galodo* disaster.

RESEARCH METHOD

This study used a qualitative design with a phenomenological approach. Kahija (2017) defines phenomenological research as a reflective inquiry into the subjective experiences of participants who have encountered a specific event or phenomenon. This approach enabled an in-depth exploration of how older adults interpreted their lived experiences after the *galodo* natural disaster. Older adults were selected because they had extensive life experience and had lived in their current homes for longer periods than most other age groups. The phenomenological approach was therefore appropriate because it allowed participants to articulate how they experienced, interpreted, and sustained place attachment to homes affected by the *galodo* disaster.

Participants

This study involved three older adult survivors of the *galodo* natural disaster in Nagari Pandai Sikek. Participants were selected through purposive sampling. This technique allows researchers to intentionally select individuals who possess specific qualities

relevant to the phenomenon under investigation (Bernard *et al.*, 2016). In this study, eligible participants were individuals who had direct experience of the disaster, could communicate their experiences clearly, and were able to reflect on the meanings of those experiences. Eligible participants also had to be willing to share information based on their knowledge, memories, and life experiences within the community.

The inclusion criteria required participants to be 60 years of age or older, to have lived in Pandai Sikek for at least 20–30 years, and to have previously lived elsewhere before returning to Pandai Sikek. These criteria enabled the study to identify older adults who could provide rich, relevant, and reflective accounts of place attachment.

The first participant, EY, was a 60-year-old woman and a native resident of Pandai Sikek. She had lived in Pandai Sikek for 39 years. Before returning to the village, she lived in Palembang for 14 years because of her husband's employment. In addition to managing household responsibilities and farming, EY actively participated in social activities, including religious study groups at the mosque and communal cooking during neighborhood celebrations.

The second participant, ND, was a 69-year-old woman and a native resident of Pandai Sikek. She had lived in Pandai Sikek for 52 years after spending 13 years with her family in Tanjung Balai Karimun. During her residence in Pandai Sikek, ND actively participated in community groups and neighborhood activities. At the time of the *galodo* disaster, ND lived alone because her husband had passed away and her children had established their own households. Despite living alone, ND chose to remain in her home because she valued her active involvement in the local community.

The third participant, AZ, was a 70-year-old woman and a native resident of Pandai Sikek. She had lived in Pandai Sikek for 57 years. After marriage, AZ moved to Payakumbuh to live with her husband. After her husband passed away, she worked in several

occupations, including weaving, producing cane sugar, locally known as *saka*, and farming. AZ remained actively involved in community activities in Pandai Sikek, particularly communal cooking for village events.

After all participants provided informed consent, interviews were scheduled according to their availability. Data collection took place at the participants' residences in Nagari Pandai Sikek.

Data Collection

This study used semi-structured, in-depth interviews as the primary data collection method. These interviews enabled participants to describe their experiences in detail while allowing the researcher to explore meanings that emerged during the conversation. Interpretative Phenomenological Analysis was used to examine how participants made sense of their subjective experiences. This analytical orientation also guided the interview process, particularly in developing questions that encouraged reflection on lived experience.

Phenomenological research is grounded in three foundational principles: phenomenology, hermeneutics, and idiography (Smith *et al.*, 2009; Kahija, 2017). Phenomenology emphasizes *epochē*, which requires researchers to bracket personal assumptions, preconceptions, and prior knowledge. This process helps researchers approach participants' experiences with openness. Hermeneutics concerns the interpretation of how participants make sense of their experiences. Idiography emphasizes the uniqueness of each participant's interpretation and requires each account to be understood within the context of the participant's life. These principles guided the research process from data collection to interpretive analysis.

Procedure

This study began with rapport-building between the researcher and each participant. Rapport had been initiated during the MBKM Community Service Program on Disaster Management in Nagari Pandai Sikek. This prior

engagement provided a foundation for close and trusting interactions with the older adult participants. The researcher used the Minang language to facilitate communication and ensure mutual understanding. The researcher also used nonverbal responses, such as nodding, attentive eye contact, and active listening, to create a comfortable environment in which participants could narrate their experiences openly.

The interviews used neutral questions derived from an interview guide. The guide was developed based on the psychological-process dimension of place attachment proposed by Scannell and Gifford (2010). The questions were designed to support the main objective of the study, namely to understand the subjective experiences of place attachment among older adult survivors of the *galodo* natural disaster. The questions also allowed participants to interpret their experiences freely.

The study received ethical approval from the Research Ethics Committee of the Faculty of Medicine, Universitas Andalas. Participants provided informed consent after receiving a clear explanation of the study procedures. The informed consent form explained the use of recording devices, the voluntary nature of participation, and the participants' right to provide or withhold information during the interview process.

Each participant completed two interview sessions. The first interviews lasted 74 minutes for EY, 122 minutes for ND, and 73 minutes for AZ. The second interviews lasted 34 minutes for EY, 100 minutes for ND, and 73 minutes for AZ. During the interviews, the researcher listened closely to participants' narratives and identified key points for further probing. The researcher also observed participants' body language, facial expressions, and speech patterns as they recounted their experiences. A mobile phone was used to record the interviews and support accurate transcription and analysis.

Data Analysis

This study analyzed participants' experiences using Interpretative

Phenomenological Analysis (IPA). Kahija (2017) explains that interpretation constitutes the central activity of IPA. IPA uses a double-hermeneutic process, in which participants interpret their own life experiences, and the researcher interprets those participant interpretations.

The researcher developed interpretations through close and repeated engagement with the interview transcripts. The first stage involved reading the transcripts repeatedly, reflecting on their content, and focusing on the participants' documented experiences. The second stage involved developing exploratory comments on significant parts of participants' responses. In IPA, exploratory comments may be descriptive, linguistic, or conceptual. Descriptive comments focus on the content of participants' accounts. Linguistic comments examine participants' use of language. Conceptual comments involve deeper interpretive questions developed by the researcher (Smith, 2009).

The third stage involved generating emergent themes from the exploratory comments. This stage required the researcher to identify core meanings and transform them into concise phrases that represented participants' experiences. Emergent themes were specific and contextual because they remained closely connected to participants' experiential statements. The fourth stage involved identifying superordinate themes. These themes represented broader categories that incorporated several emergent themes with shared experiential meanings.

The fifth stage involved identifying patterns across participants' experiences. This process examined relationships among superordinate themes and identified themes that appeared across nearly all participants. These cross-participant patterns, also referred to as parent themes or inter-participant superordinate themes, represented prominent shared meanings. In the final stage, all themes were organized into more abstract interpretive phrases that represented the relationships among superordinate themes. These themes

were then explained through detailed descriptions and supported by relevant verbatim quotations (Kahija, 2017).

This study used methodological triangulation to enhance the credibility of the qualitative data. Methodological triangulation involves comparing and integrating data obtained through different methods to examine the same phenomenon (Patton, 2002). This study used participant observation, observation of the residential environment, and document analysis to support data validation.

Participant observation involved recording participants' gestures, facial expressions, and vocal intonations during the interviews. These observations helped contextualize how participants expressed specific units of experience. Observation of the residential environment involved identifying contextual features that shaped participants' narratives, such as the mosque, village hall, and field. These places served as meaningful settings in participants' accounts of community life and place attachment.

Document analysis involved asking participants to present and describe photographs, notes, or other documents that enriched the interpretation of their experiences with their living environment. Findings from participant observation, environmental observation, and document analysis were recorded separately. These findings were then compared with the interview transcripts to examine consistency, differences, contradictions, and completeness in the interpretation of participants' experiences.

Before cross-checking the data, the researcher ensured that the contextual findings from observation and document analysis corresponded with the relevant units of experience in the interview transcripts. This contextual alignment enabled meaningful comparison between interview data and data obtained through other methods. The additional methods not only supported the credibility of the experiential units but also enriched the interpretation of participants' place attachment.

RESULTS

This study identified four main themes that describe how older adult survivors interpreted place attachment after the *galodo* natural disaster. These themes were: the home as an extension of personal identity, the desire to protect the home, the experience of comfort within the home, and connection to the social environment.

The Home as an Extension of Personal Identity

This theme shows that participants perceived their homes as integral to their personal, social, and cultural identities. The home was not merely a physical dwelling. Instead, participants interpreted the home as a meaningful part of the self. Their interactions with the home, memories of significant life events, and recognition of the home as a site of personal history shaped this interpretation.

All three participants described their place of residence as inseparable from their identity. Each participant expressed this attachment through a distinct subjective meaning. EY associated her home with cultural identity, particularly through the weaving tradition of Pandai Sikek. ND linked her home to her social role in the community and to the continuity of her life history. AZ interpreted her home as part of her identity because it was her birthplace and the center of her personal life journey.

EY perceived her home as an essential part of her identity. She regarded her home as inseparable from her identity because the weaving culture of Pandai Sikek had shaped her sense of self as a local weaver. EY explained this meaning in the following interview excerpt:

"Ibu kan lah dari kecil baraja batanun. Di rumah kan pulang sakola, sempat juo batanun. Tu kayak eeh labiah lamak karajoannyo di rumah lah daripado disiko. Ha itu pangana ibu, di baok alatnyo ka siko ndak lamak

mangarajoannyo do. Tapi kok ndak dibaok alat tu samo sajo, ha ancak di rumah lai bisa batanun disiko ndak ado tanun do.”

(Translation: “I’ve been learning to weave since I was little. At home, after school, I still had time to practice weaving. It feels more comfortable to do it at home than anywhere else. That’s how I feel—if I bring my weaving tools to work, it’s not comfortable to weave there. But if I don’t bring them, it’s the same; it’s better to weave at home. There’s no weaving here.”) (P1/W2/L.129-136)

This excerpt shows that weaving had strongly shaped EY’s identity within her community. EY learned to weave during childhood, and this experience reflected a cultural practice widely maintained by the indigenous people of Pandai Sikek. For EY, weaving was not only a source of livelihood. It also formed a self-narrative rooted in authenticity, cultural belonging, and attachment to her hometown.

ND expressed a similar pattern of attachment. She associated her home with her sense of self because the home supported her social role within the surrounding community. ND described this meaning in the following statement:

“Pi takah itu pun, itulah kesan-kesannyo nan baikk taraso dek awak. Ndak ta apoan do. Baa.. ndak talupoan do. Awak nan jadi ibaraiknyo.. aaa tu, aktif awak, nio bausaho untuak kemajuan nagari awak ko, aaa nan buliah lakuan yo lakuan lah.”

(Translation: “Still, those are the good memories I have. It’s okay. How could I ever forget? I’m the one who, you could say, has become-how should I put it-one of our active members. I want to help the village move forward. Whatever we can do, we’ll do it.”) (P2/W1/L.945-949)

This excerpt illustrates how ND’s social role strengthened her connection to her home. ND perceived herself as someone who contributed to village development and served as a person with whom community members could exchange ideas. Her long engagement with the community fostered a deep bond with her home. Leaving the home for an extended period would mean leaving a role that had become central to her identity. This experience led ND to interpret her home as an integral part of herself.

AZ also perceived her home as central to her identity. She connected her home to her birthplace, personal history, and emotional belonging. AZ explained this meaning in the following interview excerpt:

“Ka di pikia tanah kelahiran awak, dakek rumah awak. Ndak bisa bayang-bayangan deh, ndak bisa dituka jo nan lain do. Nyo awak ntu, yo hati wak di kampung awak. Pi alah enek caritoan, dibawo anak enek lai ndak amuah enek deh. Tu lah, hati awak ntu lah ka anu awak, ka desa awak. Ado ndak mau tau bagai deh tampek lain tu.”

(Translation: “When I think about it, this is where I was born, near my home. I cannot imagine being anywhere else. It cannot be replaced by anything else. My heart belongs to my hometown. I have always said that, even when my child wanted to take me away, I did not want to leave. That is how it is. My heart is here, in my village. I do not want to know what life is like anywhere else.”) (P3/W1/L.450–455)

This excerpt shows that AZ interpreted her home as irreplaceable. The home had served as the center of her life for many years. It contained the history of her life and shaped her understanding of who she was. For AZ, the home was not merely a location but a place that preserved personal continuity and emotional belonging.

The Desire to Protect the Home

This theme shows that participants expressed a strong desire to protect their homes, land, community, and local environment. This desire reflected affective and cognitive dimensions of place attachment. Participants associated the home with belonging, inheritance, cultural values, and responsibility toward future generations. These meanings motivated them to preserve the physical, social, and cultural continuity of their living environment.

All three participants described their desire to protect their homes through different concerns. EY emphasized the protection of natural resources for children and grandchildren. ND emphasized community advancement and village development. AZ emphasized awareness of external threats that could affect the local environment and agricultural livelihoods.

EY expressed concern about a proposed geothermal project in Pandai Sikek. She perceived the project as a potential threat to water availability, agricultural productivity, and community sustainability. EY explained this concern in the following excerpt:

“Apolai alah sudah bencana ha tu urang ka mambuek geotermal lo disiko. Umumnyo masyarakat siko menolak gitu, geotermal iko kan. Kini pandai sikek ko rentan, ndak hujan se hari wak lah kekeringan. Kalau untuk geotermal tu kan membutuhkan debit air yang lebih besar gitu. Tu air tu yang kurang disiko, jadi samantaro untuak petani itu kan lah banyak itunyo kekurangannyo. Banyak efek sampingnyo kalau awak baco-baco dari apo kan, dari google gitu kan. Banyak efek sampingnyo.”

(Translation: “After this disaster, people have also planned to build geothermal facilities here. Most people here reject the geothermal project. Pandai Sikek is now vulnerable. If it does not rain even for one day, we may experience drought. A

geothermal project needs a larger water supply. Water is already limited here, and many farmers are already struggling with shortages. I have read that there are many side effects.”) (P1/W2/L.149–157)

This excerpt indicates that EY viewed the geothermal project as a threat to water sources that supported agricultural life. Her opposition to the project reflected a desire to protect natural resources and preserve the local environment. This protective stance also reflected concern for the well-being of future generations who would continue living in Pandai Sikek.

ND expressed a desire to protect her community through active involvement in village development. Her motivation reflected a sense of responsibility to improve the quality of life within the community. ND described this commitment in the following statement:

“Itu.. kita tu ingin menolong bagaimana nagari kita ini maju. Di.. 2014 kami lomba nagari yo kami kan dapat juara 2 nasional. Se indonesia. Sampai malam tu mengerjakan apa yang diperlu, apa yang ka di ekspos makanan awak tu kita tu memikirkan kroket singkong. Untuk ka Padang, jadi waktu itu kita bikin tu.”

(Translation: “We wanted to help our village move forward. In 2014, we joined a village competition and won second place nationally in Indonesia. We worked late into the night to prepare what was needed and to decide what local food to present. We prepared cassava croquettes for the event in Padang.”) (P2/W1/L.186–190)

This excerpt demonstrates ND’s commitment to village advancement. Her involvement in a national-level village competition reflected pride, responsibility, and active participation in community life. Through these experiences, ND identified village needs and sought to contribute to community improvement. Her desire to protect the home,

therefore, extended beyond the physical residence and included the broader social development of the village.

AZ also expressed a commitment to protecting her community from external threats. She associated these threats with proposed geothermal development, which she believed could alter the local environment and affect agricultural livelihoods. AZ described her awareness in the following excerpt:

“.. ntun patang.. apo.. rapek urang. Pai enek. Mancaliak mandanga sajo alah, kok indak sato mangecek pun awak tau aa nan ka tajadi di nagari wak yeh.. nagari awak mah eeh.”

(Translation: “Just yesterday, there was a meeting. I went there. I only watched and listened. Even though I did not speak, I still know what is happening in our village. It is our village, after all.”) (P3/W2/L.252–255)

This excerpt shows that AZ remained attentive to issues affecting her village. Her presence at the meeting reflected concern for the future of the community. Although she did not speak during the meeting, she sought to understand the possible consequences of the project. Her awareness of potential environmental risk strengthened her desire to protect the place she considered home.

Experiencing the Comfort of Home

This theme describes how participants experienced comfort within their homes. Participants attributed this comfort to positive evaluations of their physical, economic, and social environments. Their homes supported daily routines, provided access to livelihood resources, and enabled meaningful interactions with other community members. These conditions made the home a place where participants could meet daily needs and experience stability.

All three participants reported feeling comfortable in their homes. This comfort emerged from a pleasant natural environment,

ease of meeting daily needs, continuity of routine activities, and positive relationships with community members. Because of this comfort, participants expressed no desire to leave their homes, even after the *galodo* disaster.

EY felt comfortable in her home because Pandai Sikek supported farming and daily subsistence. She compared Pandai Sikek with Palembang, where she had previously lived. EY described this difference in the following excerpts:

“Kalau ibu tinggal di Palembang dulu tu kan tu.. Daerahnya angek, gersang. Kalau di apo ko wak kan subur, untuk pertanian masih apo disiko kan, lancar kalau mananam apo se gitu kan. Pi kalau di Palembang mananam untuak keluarga wak surang kayak sampadeh, kunyik kalau di kampuang urang ndak jo bisa kan.”

(Translation: “When I lived in Palembang, the area was hot and dry. Here, the land is fertile and still good for farming, so that we can grow many things. In Palembang, we could only grow enough for our own family, such as ginger and turmeric.”) (P1/W1/L.310–314)

“Tapi yo mungkin awak di pandai sikek ko kan di ketinggian yo kesuburan tanahnya tu malimpah, aia ndak perlu bingung, lah ado mato aianyo.”

(Translation: “Perhaps because Pandai Sikek is located in the highlands, the soil is very fertile. We also do not need to worry about water because there are springs here.”) (P1/W1/L.317–319)

These excerpts show that EY associated home comfort with the natural characteristics of Pandai Sikek. The cool climate, fertile soil, and abundant water sources supported her farming activities. The proximity of orchards and rice fields also helped her meet daily subsistence needs. These environmental qualities

strengthened EY's comfort and reinforced her desire to remain in her home.

ND experienced comfort through social interaction. Her comfort was closely related to conversations with friends, religious activities at the mosque, and discussions with fellow community members. ND described this experience in the following excerpt:

"Itu... untuk persatuan ko haaa.. awak gitu tu.. ndak di rumah, ndak di rumah.. lah hilang aka urang ba iyo-oyo ko.. iyo.. awak lah ba kecekan lo ka anak di rumah, "ama di rumah lu yo, kadang urang tu payah lo ndak ado awak. kadang awak ma agiah pangarahan ka inyo. Takah iko.. takah iko... bisa tabukak pikiran kan.. kalau ndak ado tampek lawan ba iyo tu.. tu ndak tabukak pikirannyo do."

(Translation: "That's how it is in our community. If I'm not at home, people miss the chance to share ideas. I've even told my kids, 'Mom will just stay home, okay? Sometimes people have a hard time when I'm not there.' Sometimes I'm the one who gives them guidance, showing them different ways of thinking so their minds can be open. If there's nowhere to share opinions like that, their minds won't be open.") (P2/W2/L.390-395)

This excerpt shows that social interaction gave ND a sense of purpose and comfort at home. Her daily life became meaningful because she could exchange ideas and provide guidance to others. For ND, the comfort of home differed from other environments because the home enabled her to maintain social roles that she valued.

AZ experienced comfort because her home environment supported daily work and livelihood activities. She had engaged in farming, sugarcane processing, and weaving. AZ described the relationship between work, home, and comfort in the following excerpt:

"Ndeei...yo lah jaleh wak di kampuang wak. Karajo nan bisa disiko, mangilang

dulu banyak tabu di siko, ma makai aa nan ado di siko tu nyo. Ba ladang, ado tanah.. subur di siko, katuju.. batanun aaa nan katuju bana. Di siko bana tampeknyo, namo nagari wak se dari itu. Urang ee.. pandai tanun, pandai manyikek. Iyoo ntun.. pusako nenek moyang dulu, rumah iko."

(Translation: "Yes, of course, I am in my own village. Here, people used to work with sugarcane because there was a lot of it. Now we use what is available. There is land for farming, and the soil is fertile. I especially like weaving. This is the place for it. Even the name of our village comes from weaving. People here are skilled at weaving and dyeing. This house is an ancestral inheritance.") (P3/W2/L.75-80)

This excerpt indicates that AZ perceived her home as a place that supported meaningful work. Farming, sugarcane processing, and weaving allowed her to meet daily needs while maintaining continuity with local cultural practices. This convenience created a sense of comfort and contributed to her reluctance to leave her home.

Connection to the Social Environment

This theme describes participants' sense of connection to neighbors, peers, and other community members. Familiar faces, routine encounters, and shared activities fostered emotional closeness within the neighborhood. These relationships strengthened participants' sense of belonging and reinforced attachment to their place of residence.

All three participants reported a strong connection to their social environment. This connection emerged through togetherness, shared activities, social support, and a familial atmosphere among community members. The participants described relationships characterized by mutual care, assistance, and support during difficult situations, including the *galodo* disaster. These social bonds made the neighborhood meaningful and strengthened participants' attachment to home.

EY described a strong connection to her social environment through relationships with neighbors. This connection was evident in mutual aid, collective work, and communal cooking, especially after the *galodo* disaster. EY explained this experience in the following excerpt:

*“Yo tu, senang.. yo, masak-masak basamo. Manyiapkan apo-apo ko aa basamo. Kok ado gotong royong, karajo basamo. apo basamo-samo wak. Kalau dihadapi situasi bencana patang tu surang nak ****, tantu ndak ndak akan bisa.. gitu kan. Dek basamo, saling ajak manolong ko tadi, awak bisa basuo, tu baa lah yo.. kaba si anu, kaba si itu.. situ momen saliang pedulinyo.”*

(Translation: “Yes, it is pleasant to cook together and prepare things together. When there is mutual aid, we work together and do everything together. If we had faced the disaster alone, we could not have managed. Because we were together and encouraged each other to help, we could meet and ask, ‘How is this person? How is that person?’ That was the moment when we truly cared for one another.”) (P1/W2/L.54–59)

This excerpt shows that togetherness enabled EY to experience warmth, care, and support in her social environment. EY perceived communal interaction as evidence that she was not alone in daily life, particularly during disaster recovery. The *galodo* disaster became a moment that strengthened communal solidarity and deepened EY’s connection to her social environment.

ND also described the connection to the social environment through community support. She perceived local residents as responsive and caring when community members experienced difficulty. ND explained this meaning in the following excerpt:

“Kok ado nan susah-susah, takah galodo patang.. samo-samo mangalami, yoo ado

raso membantu. Ado tu, ndak payah gai untuak urang disiko ko baragiah untuak basamo lah. Ndak pilik. Ndak ka mungkin dibiakan sajo awak susah surang di urang siko tu, lah dari aaa ndak ado mampaduliaan tu ndak ado.”

(Translation: “When someone is in trouble, like during the flood, we all feel the desire to help because we experienced it together. It is easy for people here to support each other and stay united. No one is stingy. Letting someone suffer alone is not something we do here. The idea of not caring about others does not exist here.”) (P2/W1/L.954–959)

This excerpt indicates that ND perceived the community as a source of both practical and emotional support. Community members responded to difficulties with care and mutual assistance. This support made ND feel valued within the neighborhood. It also strengthened her view that post-disaster recovery was a collective process supported by strong social ties.

AZ expressed a similar sense of social connection. She associated this connection with participation in communal activities, including cooking during village celebrations and working in a temporary kitchen after the disaster. AZ described this experience in the following excerpt:

“Enek tu suko ba masak-masak.. manga ajo urang, enek pai. Katuju di enek bamasyarakaik tu. Ndak katuju di enek ba asiang-asiang surang-surang tu do... tu tigo baleh hari di rumah ibu cen tu kami masak. Ndak tantu di awak.. ma masakan polisi, tantara.. tantara baratuhih tu.. di polisi.”

(Translation: “I really like cooking. Whenever there is something to do with other people, I join. I enjoy social interaction. I do not like being alone. Once, we cooked for thirteen days at Ibu Cen’s house. It did not matter who we cooked for, whether the police or the

army. There were hundreds of soldiers and police officers.”) (P3/W2/L.92–96)

This excerpt shows that communal activities allowed AZ to connect with neighbors and participate in collective recovery. These interactions created opportunities to share experiences, respond to hardship, and provide mutual support. For AZ, community participation was not merely a social obligation. It was a meaningful practice that strengthened social bonds and reinforced attachment to the home environment after the disaster.

DISCUSSION

This study explored the subjective meaning of place attachment among older adult survivors of the *galodo* natural disaster in Nagari Pandai Sikek. The analysis identified four main themes: perceiving the home as an extension of the self, desiring to protect the home, experiencing comfort within the home, and maintaining connection with the social environment. These themes show that older adult survivors developed both emotional and cognitive attachment to their homes after the disaster. The home supported personal identity, encouraged protective responsibility, provided comfort, and sustained social bonds within the community.

The first aspect of place attachment among older adult disaster survivors concerns the perception of the home as part of the self. The home functions not only as a physical dwelling but also as a space where personal identity, social roles, and life histories develop. For older adults, the home represents a place inhabited for decades. Within this space, they form memories, establish routines, and construct personal narratives. The home, therefore, shapes ideas, emotions, values, skills, and behavioral tendencies within everyday life (Peng *et al.*, 2020). Place attachment strengthens identity because older adults integrate their perceptions of home with their personal characteristics and with the characteristics of surrounding community

members (Sun *et al.*, 2022). In this study, older adults developed identity through social roles enacted within their living environment. These roles included participating in community activities, exchanging ideas with neighbors, and contributing to village life. Through these roles, participants felt needed, valued, and socially meaningful.

Accumulated life memories also explain how older adults associate the home with the self. For older adults, the home is not only a physical structure. It is also a repository of life experiences. These memories connect older adults to their homes and integrate the home into their personal histories (Sun *et al.*, 2022). The meaning attributed to the home, therefore, reflects both life trajectory and identity formation. In this study, participants' attachment to home appeared in the way they interpreted the home as inseparable from personal identity, social roles, and significant life memories.

The second aspect of place attachment concerns the desire to protect the home. This desire emerged from participants' intention to preserve the home, support village development, and sustain the residential environment. For older adults, the home represents not only a place to live but also a legacy for future generations. This interpretation aligns with Dendle *et al.* (2021), who found that older adults often regard their homes as assets that should be maintained and passed on to current and future family members. Older adults also preserve home sustainability by transmitting ancestral land, houses, and family assets across generations. Beyond material inheritance, they also preserve family history, values, and memories attached to the home (Cheng *et al.*, 2021).

The desire to protect the home also appeared in participants' efforts to advance the village. Utomo *et al.* (2019) challenge the view that older adults are passive members of society. They show that older adults actively contribute to village social life and maintain important social functions within their communities. Community attachment can

motivate residents to improve their local environment (Plunkett et al., 2018). In the present study, older adult survivors participated in village activities such as creativity contests, cleanliness competitions, and training sessions. These activities enabled them to contribute to local development and expand their knowledge. This finding is consistent with Dang et al. (2022), who identify place attachment as an important factor influencing participation in social and community activities within residential environments.

Participants' protective orientation also included efforts to safeguard the natural environment from external threats. De Gea-Grela et al. (2025) found that place attachment among older adults can foster responsiveness to environmental issues through heightened risk perception, stronger community identity, and deeper social connections. In this study, participants opposed a proposed geothermal project because they perceived it as a threat to the ecological balance of their living environment. This concern became more salient after the *galodo* disaster had already disrupted the local landscape. Protective actions in this context represent responses to proposed changes to natural sites that residents consider central to daily life and incompatible with the continuity of place (Devine-Wright & Howes, 2010). Therefore, participants' efforts to improve and protect the living environment reflected more than routine community involvement. These efforts expressed a strong emotional bond with the home, local heritage, village continuity, and environmental sustainability.

The third aspect of place attachment concerns comfort within the living environment. Participants associated comfort with the ease of meeting daily needs, the presence of a pleasant natural environment, and access to meaningful, productive activities. Comfort often emerges from familiarity with the environment (Annink & Hees, 2022). This familiarity may develop through accessibility, green spaces, and public areas that support daily activities (Lai et al., 2025). Comfort also

depends on social interaction because community relationships shape how residents experience their living environment (Annink & Hees, 2022).

Access to daily necessities forms an essential component of residential comfort. In this study, access referred to the ability of older adults to work, reach farmland, and participate in activities that made their home environment valuable and difficult to replace. Matysiak (2025) found that older adults' decisions to remain at home are shaped by social, emotional, and functional factors. Functional characteristics are especially important because older adults value environments that support daily activities. Convenient access to facilities, shops, transportation, and pleasant surroundings, therefore, helps explain why older adults prefer to remain in their homes (Sun et al., 2022).

Comfort was also related to meaningful and productive activities. In this context, meaningful activities included attending religious gatherings, participating in traditional ceremonies, engaging in cultural practices, and interacting with preferred companions. Older adults experience stronger community connectedness when their environment supports activities that give meaning to daily life (Cheng et al., 2021). In this study, older adult survivors participated in neighborhood and cultural activities, including *randai*, *talempong*, and other communal events that provided spaces for interaction and daily enjoyment. Facilities and gathering places that enable older adults to participate in social and recreational activities support healthy aging (Chaudhury et al., 2021). Participation in these activities allowed participants to derive meaning from daily life and strengthen their sense of belonging. Arani et al. (2021) further argue that living environments with meaningful spaces promote calmness and independence in everyday life. Thus, older adults' attachment to their living environment was reflected in their experience of comfort, which emerged from accessible daily resources, a supportive natural

environment, and meaningful productive activities.

The fourth aspect of place attachment concerns connection to the social environment. Social bonds in this context include a sense of community, close relationships among residents, mutual care, and social support during adversity. The home provides a setting where repeated everyday interactions develop into meaningful social networks (Gardner, 2011). Social relationships with relatives, neighbors, family members, and the broader community also shape a sense of self that is closely connected to others (James, 1980). Gardner (2011) explains that these social interactions often occur in “third places,” such as small shops, cafés, parks, places of worship, community centers, and frequently used streets. In this study, participants identified village halls, mosques, and small shops as important gathering places. These places generated positive emotions, including improved mood, vitality, and enthusiasm.

Older adults experienced connection to the social environment through the care and concern shown by the community. Older adults report stronger neighborhood attachment when community members provide care, acceptance, and inclusion in social activities (Cheng *et al.*, 2021). Community care supports belonging and reduces loneliness in older adults’ daily lives. This finding is consistent with van Tilburg *et al.* (2025), who reported that strong attachment to one’s place of residence is associated with lower loneliness among older adults. In this study, participants experienced community care through greetings, mutual assistance, and material and social support after the *galodo* disaster. Therefore, their attachment to home was reflected in social connection, community solidarity, close relationships, mutual care, and support during adversity.

Overall, the findings indicate that place attachment among older adult disaster survivors arises from personal and relational attachment. Personal attachment refers to the relationship between older adults and their homes that develops through accumulated life experiences

and personal meanings attributed to the residence. In this study, personal attachment appeared in the themes of perceiving the home as an extension of the self and experiencing comfort within the home. Relational attachment refers to the social bonds and interactions formed with neighbors and the broader community. This form of attachment appeared in the themes of protecting the home and feeling connected to the social environment. These two forms of attachment interacted to shape participants’ overall experience of place attachment. As a result, the home became central to both personal identity and social continuity.

Previous research on place attachment among older adults has mainly examined stable residential settings, including densely populated urban areas and established older adult communities (Sun *et al.*, 2022; Arani *et al.*, 2021; Lai *et al.*, 2025). In these contexts, senior-friendly infrastructure, recreational spaces, community centers, and accessible public facilities support attachment to residential environments. These amenities help older adults maintain independence and improve quality of life within their communities.

The present study differs from previous research because it examined place attachment in a disaster-affected residential environment. Participants experienced the *galodo* disaster but continued to maintain a strong attachment to their homes. In some cases, the disaster appeared to strengthen this attachment. This strengthened attachment may have emerged because the disaster intensified social connections through mutual aid, emotional support, and collective participation in community activities. The disaster, therefore, deepened participants’ attachment to their living environment and reinforced their bonds with the surrounding community. This finding suggests that disasters do not only disrupt place attachment. Disasters may also become critical moments that test, reveal, and strengthen attachment to home and community.

The findings show that place attachment among older adult disaster survivors is closely linked to physical, social, and communal values that participants regard as integral to identity. The four themes demonstrate how participants interpreted their homes as extensions of themselves, sought to protect their homes, experienced comfort within their homes, and maintained a connection with their social environment. This study focused primarily on the physical and social dimensions of place attachment among survivors of the *galodo* disaster. However, participants also expressed spiritual dimensions of attachment. These dimensions included reflections on divine will after the disaster, increased religious devotion, and the desire to spend their remaining years peacefully at home. Future research should examine the spiritual dimension of home attachment among older adult disaster survivors.

This study used a qualitative phenomenological design that emphasized the depth of participants' experiential accounts. Several limitations should therefore be acknowledged. First, limited opportunities for probing during interviews with older adult participants may have constrained the exploration of some subjective meanings. Second, the researcher's role as the primary instrument of analysis may have influenced the interpretation of participants' experiences. Future studies should involve more diverse participants, longer engagement in the field, and additional triangulation strategies to strengthen the interpretation of place attachment in disaster-affected communities.

CONCLUSIONS

This study, "Experiences of Place Attachment among Older Adult Survivors of the *Galodo* Natural Disaster in Nagari Pandai Sikek," shows that place attachment among older adult disaster survivors is rooted in emotional, personal, and relational bonds with the home. This attachment emerged through four main experiences: perceiving the home as

an extension of the self, desiring to protect the home, experiencing comfort within the home, and maintaining connection with the social environment.

Older adult survivors interpreted their homes through personal and relational meanings. They viewed the home not only as a physical dwelling but also as a source of identity, continuity, belonging, and social connection. These meanings were closely linked to the physical, social, and communal values embedded in their living environment.

These findings broaden the conceptual understanding of place attachment in disaster-affected communities. In a culturally rich society such as Nagari Pandai Sikek, attachment to place extends beyond the physical structure of the home. It also includes collective social relationships, cultural continuity, and community-based meanings that support older adults as they continue to live in their homes after a disaster.

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AI USAGE STATEMENT

Generative artificial intelligence (AI) tools were used solely to assist in identifying potentially relevant literature to support the analysis and discussion of the research findings. All references suggested through AI-assisted searches were independently reviewed and verified by the authors. The interpretation, analysis, paraphrasing, and writing of the manuscript were conducted by the authors, who take full responsibility for the accuracy, integrity, and content of the manuscript.

AUTHORSHIP CONTRIBUTION

Septiara Pratiwi: Conceptualization, methodology, investigation, data collection, formal analysis, interpretation of findings, and writing-original draft.

Septi Mayang Sarry: Supervision, methodology, validation, review of the interview guide, guidance on data analysis and interpretation, and writing-review and editing.

Dwi Puspasari: Supervision, methodology, validation, review of the interview guide, guidance on data analysis and interpretation, and writing-review and editing.

Yantri Maputra: Supervision, validation, critical review, and writing-review and editing.

All authors reviewed and approved the final version of the manuscript.

CONFLICT OF INTEREST

The authors declare that there are no conflicts of interest regarding the research, authorship, or publication of this manuscript.

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