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DETERMINATION OF THE COPING MECHANISMS ADOPTED BY FLOOD VICTIMS IN OGBARU L.G.A, ANAMBRA STATE AND EVALUATION OF THEIR EFFECTIVENESS IN MANAGING MENTAL HEALTH CHALLENGES

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ABSTRACT

Flooding is a recurring disaster in Ogbaru Local Government Area, Anambra State, Nigeria, yet the coping mechanisms adopted by residents and their effectiveness in managing flood-related mental health challenges remain empirically undocumented. This study determined the coping mechanisms used by flood victims in Ogbaru LGA and evaluated their perceived effectiveness in managing associated mental health outcomes, including anxiety, depression, and post-traumatic stress symptoms. A survey design was adopted, using stratified random and purposive sampling to select respondents, with structured questionnaires administered to 399 residents (385 valid returns, 96.5% response rate) and interviews conducted with 20 town/village heads across ten purposively selected, flood-affected communities. Mental health symptoms were assessed using standardized screening tools (GAD-7, PHQ-9, PCL-5), and coping strategies and their perceived effectiveness were measured via Likert-scale items. Results showed high reported prevalence of anxiety, depressive, and PTSD symptoms, with feeling nervous (89.9%), constant worry/restlessness (91.9%), and feeling down (84.9%) among the most endorsed indicators. Reliance on religious practices (93.5%) and support from family and friends (88.8%) were the most widely adopted and most perceived-effective coping strategies, while avoidance was moderately endorsed but rated less effective (54.5%), and professional help was both rarely used and rarely perceived as helpful (5.4%), reflecting the near-total absence of accessible mental health services in the area rather than the strategy's inherent inadequacy. The study concludes that flood victims in Ogbaru LGA rely almost entirely on informal, faith and community-based coping resources in the absence of structured psychosocial support, and recommends integrating mental health and psychosocial support into disaster response frameworks while leveraging existing informal support structures.

Keywords: *flooding, coping mechanisms, mental health, Ogbaru, Anambra State, Nigeria*

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1.0 INTRODUCTION

1.1 BACKGROUND

Flooding is among the most frequent and destructive natural hazards worldwide, and its toll extends well beyond physical destruction and economic loss. Several studies have shown that flood victims are at risk of developing significant mental health issues, including anxiety, stress, depression, and posttraumatic stress disorder, driven by factors such as loss of loved ones, displacement, property damage, and livelihood disruption (Rahman et al., 2025). A UK-based meta-analysis found that flood victims experienced substantially higher rates of long-term mental health problems compared to non-flood victims (Cruz et al., 2020), underscoring that psychological recovery can lag far behind physical reconstruction. The World Health Organization has similarly noted that the psychological toll of floods often persists long after physical damage has been repaired (WHO, 2023).

This burden is acutely visible in Ogbaru Local Government Area of Anambra State, Nigeria. Situated along the banks of the River Niger and bordering Delta and Rivers States, Ogbaru is a low-lying, riverine agrarian area that has suffered near-annual flooding for decades. A joint post-flood assessment covering the 2024 flood season identified Ogbaru as one of the worst-affected LGA in Anambra State, with tens of thousands of individuals affected by displacement, farmland destruction, and loss of livelihood (International Organization for Migration [IOM] Nigeria, National Emergency Management Agency [NEMA], & Anambra State Emergency Management Agency [SEMA], 2024). For a population whose food security depends almost entirely on farming, repeated flooding represents not an isolated shock but a chronic, recurring stressor with cumulative mental health implications.

Faced with such recurring stress, affected individuals draw on a range of coping mechanisms some adaptive, some maladaptive to manage distress. Adaptive strategies such as seeking social support and reframing traumatic experiences can foster resilience and recovery, whereas maladaptive responses such as avoidance, aggression, and emotional detachment tend to worsen psychological distress over time (Masten & Narayan, 2012). Evidence from Nigerian populations illustrates this pattern directly: a study of flood-affected

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children in Maiduguri found that higher levels of maladaptive coping were significantly associated with greater odds of psychological distress, while even moderate adaptive coping was not always sufficient to offset the compounding effects of chronic adversity (Haruna et al., 2025). Similarly, research among displaced adolescents in North-East Nigeria found that reliance on maladaptive strategies such as social withdrawal was linked to worse psychological outcomes and slower recovery (David et al., 2023). At the household level, a study of rural flood victims in Benue State, Nigeria identified specific coping strategies including reliance on social networks, religious coping, and asset liquidation adopted by farming communities to manage flood-related hardship (Adeleke et al., 2024), though that study did not evaluate how effective these strategies actually were at reducing psychological distress.

Coping is also shaped by demographic and cultural factors. Gendered differences in coping style and mental health risk after disasters have been documented across contexts (Akerkar & Fordham, 2017; Rahman et al., 2023), and researchers have cautioned that effective post-disaster mental health support cannot rely on a one-size-fits-all approach given how strongly local cultural and religious norms shape coping responses (Akerkar & Fordham, 2017).

Despite this expanding literature, important gaps remain. Much existing research documents which coping strategies flood victims adopt, but fewer studies rigorously evaluate how effective these strategies actually are at mitigating specific mental health outcomes such as anxiety, depression, and PTSD symptoms a gap explicitly noted even in the closest Nigerian precedent, the Benue State household study (Adeleke et al., 2024). Moreover, despite Ogbaru's status as one of the most consistently flood-affected LGAs in Nigeria, no study to date has examined the coping strategies of its residents or evaluated their effectiveness in managing mental health outcomes.

This study therefore aims to determine the range of coping mechanisms adopted by flood victims in Ogbaru LGA, Anambra State, and to evaluate the effectiveness of these mechanisms in managing associated mental health challenges.

1.2 Statement of the Problem

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Flooding in Ogbaru LGA is not an isolated event but a recurring annual disaster that has repeatedly displaced residents, destroyed farmlands and livelihoods, and disrupted access to schools, markets, and health facilities (IOM Nigeria, NEMA, & SEMA, 2024). Each flood season effectively resets the community's recovery process, exposing residents to cumulative rather than one-off psychological stress. Yet despite the scale and regularity of this exposure, the psychological dimension of the disaster remains largely unaddressed in both practice and research.

At the policy level, Nigeria's disaster response framework remains heavily weighted toward physical relief; food, shelter, and non-food items with mental health and psychosocial support (MHPSS) largely absent from the national disaster response plan despite evidence that there is no MHPSS implementation plan or framework in national policy (Oluka et al., 2023). This gap is compounded by Nigeria's broader mental health treatment shortage: only a small fraction of people with diagnosable mental disorders in Nigeria receive treatment, and specialist mental health care is concentrated in a handful of urban centres, leaving rural and riverine communities such as Ogbaru with virtually no access to formal psychological support (Abdulmalik et al., 2013). In the absence of accessible clinical intervention, flood victims in communities like Ogbaru are left to rely entirely on informal, self-directed coping mechanisms whether adaptive or maladaptive to manage the psychological aftermath of each flood (Oluka et al., 2022)

This creates a critical research and practice problem. First, without formal mental health services, it is not clear which coping strategies Ogbaru residents use to manage flood-related psychological distress. Second, even where certain coping behaviours are observable, it is not known whether they are effective that is, whether they meaningfully reduce symptoms of anxiety, depression, or trauma, or whether they merely mask distress or, in the case of maladaptive strategies, worsen it over time (Haruna et al., 2025). Nigerian studies conducted elsewhere (e.g., Benue State, Maiduguri, North-East Nigeria) suggest that coping strategies vary widely by context and are not uniformly beneficial (Adeleke et al., 2024; Haruna et al., 2025; David et al., 2023), yet no comparable evidence exists for Ogbaru specifically.

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Existing research on Ogbaru has instead concentrated on the hydrological and infrastructural dimensions of flooding causes and effects, damage to roads and farmlands, and economic loss leaving the psychological experience of its residents undocumented.

This absence of context-specific evidence means that any future psychosocial intervention designed for Ogbaru would have to rely on assumptions borrowed from other regions or countries, with no guarantee that those coping models translate to Ogbaru's particular cultural, religious, and socioeconomic realities. Without empirical data on what coping mechanisms residents currently use and how well those mechanisms actually work, policymakers, humanitarian agencies (such as NEMA and SEMA), and mental health practitioners lack the evidence base needed to design interventions that are both relevant and effective for this population.

It is against this notion that the present study seeks to determine the coping mechanisms adopted by flood victims in Ogbaru LGA and to evaluate the effectiveness of these mechanisms in managing their mental health challenges.

1.3 Aim and Objectives

Aim of the Study

The aim of this study is to determine the coping mechanisms adopted by flood victims in Ogbaru Local Government Area, Anambra State, and to evaluate the effectiveness of these mechanisms in managing their mental health challenges.

Objectives

The specific objectives of the study are to:

1. Identify the socio-demographic characteristics of flood victims in Ogbaru LGA;
2. Determine the range of coping mechanisms adopted by flood victims in managing flood-related psychological distress;
3. Assess the mental health challenges (such as anxiety, depression, and post-traumatic stress symptoms) experienced by flood victims in the study area;
4. Evaluate the effectiveness of the identified coping mechanisms in

reducing or managing these mental health challenges;

2.0 LITERATURE REVIEW

Concept of Flooding and Flood Disasters

Flooding refers to the overflow of water beyond its normal confines, submerging land that is typically dry, and is classified among the most common and damaging natural hazards globally due to its frequency, wide geographic reach, and capacity to cause both immediate and long-term harm (Rahman et al., 2025). Flood disasters are distinguished from routine flooding by the scale of disruption they cause to lives, property, and livelihoods, often overwhelming the coping capacity of affected communities.

Concept of Coping Mechanisms

Coping mechanisms are the cognitive and behavioural strategies individuals use to manage the internal and external demands of stressful situations (Masten & Narayan, 2012). They are broadly classified as adaptive strategies such as seeking social support, problem-solving, and positive reappraisal that support long-term psychological adjustment or maladaptive, such as avoidance, denial, and substance use, which may relieve distress in the short term but worsen mental health outcomes over time.

Concept of Mental Health and Psychological Distress

Mental health is a state of psychological well-being that enables individuals to cope with life's normal stressors, work productively, and contribute to their community, while psychological distress refers to the emotional suffering commonly manifesting as anxiety, depression, or trauma symptoms that arises when coping capacity is exceeded by the demands of a stressful event such as a flood disaster.

Theoretical Framework

This study is anchored on Lazarus and Folkman's (1984) Transactional Model of Stress and Coping, which conceptualizes coping as a dynamic process arising from an individual's cognitive appraisal of a stressor (in this case, flooding) relative to their perceived ability to manage it. The model distinguishes between problem-focused coping, aimed at addressing the source of stress directly, and emotion-focused coping, aimed at regulating the

emotional response to it, a distinction that maps closely onto the adaptive/maladaptive framing used throughout this study. The model is well suited to this research because it treats the effectiveness of a coping strategy as contingent on context, explaining why the same coping behaviour may benefit one flood victim while proving ineffective, or even harmful, for another.

2.2 Empirical Review

Flooding and Mental Health Outcomes

Empirical evidence across multiple countries consistently links flood exposure to elevated psychological distress. In the UK, a narrative synthesis and meta-analysis found significantly higher rates of long-term mental health problems among flood victims compared to non-flood-affected populations (Cruz et al., 2020). In Bangladesh, flood-affected men reported measurable increases in anxiety and depressive symptoms tied to loss of income and livelihood disruption (Rahman et al., 2025), while flood-affected women reported distinct psychological impacts linked to caregiving burden and household loss (Rahman et al., 2023). In Nigeria, children affected by the Maiduguri floods showed significant psychological distress, with severity closely tied to the coping strategies they employed (Haruna et al., 2025), and displaced adolescents in North-East Nigeria similarly reported elevated psychological symptoms following flood-related displacement (David et al., 2023).

Coping Mechanisms Adopted by Flood Victims

Studies document a fairly consistent set of coping strategies across contexts, though their prevalence varies. In rural Benue State, Nigeria, flood-affected farming households relied heavily on social networks, religious coping, and asset liquidation to manage flood-related hardship (Adeleke et al., 2024). Qualitative research in Malaysia similarly found that psychological preparedness for floods and the coping behaviours that follow from it is shaped by risk perception, self-efficacy, and social support (Ameruddin et al., 2025), while a phenomenological study of repeatedly flood-affected residents in Jitra, Kedah identified community-rooted resilience-building practices as central to how residents managed recurring flood trauma. Across these studies, social support consistently emerges as the most

widely reported and most protective coping resource, while avoidance and denial recur as common but less beneficial responses.

Effectiveness of Coping Mechanisms

Fewer studies move beyond identifying coping strategies to actually testing their effectiveness. Where effectiveness has been assessed, findings suggest the relationship is not straightforward: in Maiduguri, maladaptive coping was significantly associated with greater psychological distress among flood-affected children, but adaptive coping alone did not always fully offset distress under conditions of chronic, repeated flooding (Haruna et al., 2025). This suggests that coping effectiveness may depend heavily on the severity and recurrence of the flood exposure itself, a dimension highly relevant to a chronically flood-affected area like Ogbaru.

Socio-demographic Influences on Coping

Coping patterns and their effectiveness are not uniform across demographic groups. Gender differences in disaster-related mental health and coping have been documented across contexts, with women and men often facing different stressors and drawing on different support resources (Akerkar & Fordham, 2017; Rahman et al., 2023). Cultural and religious context also shapes which coping strategies are available and considered acceptable, reinforcing that coping effectiveness cannot be assumed to generalize across populations without context-specific study (Akerkar & Fordham, 2017).

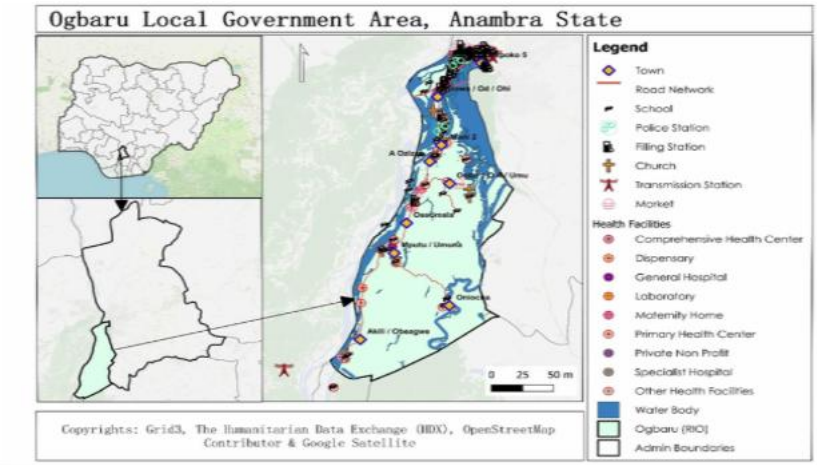
2.3 Gap in Literature

Taken together, the literature establishes clearly that flooding harms mental health and that victims adopt identifiable coping strategies, but it stops short of systematically evaluating how effective those strategies are, particularly under conditions of chronic, repeated flood exposure. Existing Nigerian studies are concentrated in Benue State, Maiduguri, and the North-East (Adeleke et al., 2024; Haruna et al., 2025; David et al., 2023), leaving Ogbaru LGA despite being one of the most consistently flood-affected areas in the country entirely unstudied on this dimension. This study addresses that gap by empirically determining the coping mechanisms adopted by Ogbaru flood victims and evaluating their effectiveness

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against measurable mental health outcomes.

3.0 STUDY AREA



Map showing Anambra State, Ogbaru Local Government Area and its Communities SOURCE: GRID3, Humanitarian Data Exchange, OpenStreetMap contributors, and Google Satellite (2024)

Ogbaru Local Government Area is located in the southwestern part of Anambra state, with its administrative headquarters in the port town of Atani. The LGA occupies an area of 388km^2 with a population of approximately 312,000, lying between latitudes 5°42'N and 6°08'N and Longitudes 6°42'E and 6°50'E. It is bounded to the north by Onitsha, to the south by Rivers state, to the west by Delta state and to the east by Idemili South, Ekwusigo and Ihiala LGA's.

The study area comprises sixteen towns including Atani, Akili-Ogidi, Akili-Ozizor, Amiyi, Mputu, Obeagwe, Ohita, Odekpe, Ogbakuba, Ochuche, Ossomala, Ogwu-aniocha, Umunankwo, Umuzu, Okpoko, and Ogwu-ikpele. Ogbaru is a riverine area with all sixteen of its communities situated on the islands or along the banks of River Niger, making it structurally one of the most flood-vulnerable localities in Nigeria. Its terrain is predominantly flat and low-lying with extensive flood plains, and the shallow depth of the River Niger makes the area susceptible to frequent flooding during the rainy season. The LGA is predominantly commercial with residents engaged primarily in farming, fishing, and trading.

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4.0 METHODOLOGY

The study was carried out using a survey approach. The stratified random sampling technique and purposive sampling technique were adopted in the selection of sampled individuals. The primary method of data collection for this study involves structured questionnaires and interviews administered to the selected respondents. The data used for this study was obtained through the use of questionnaires administered on selected residents of the study area and also interviews conducted on health professionals. Out of the numerous health centers in the study area, only five hospitals were utilized for this study, these were purposively selected and they pleaded to be anonymous. These specific facilities were selected because they were the only ones within the study area that maintained consistent medical reco
rds and patient archives spanning the periods before and after the major flooding incidents of 2012 and 2022. For the primary respondents of the study questionnaire, a total of 399 persons were sampled but only 20 town/village heads were selected and interviewed. These were sampled from the 10 communities already selected purposively due to the reason that they were more affected in Ogbaru than others as was gathered during our reconnaissance survey of the study area. Given the displaced nature of the population and the difficulty in locating individuals who experienced specific trauma during the 2012 and 2022 floods, the snowball sampling technique was employed.

To evaluate coping mechanisms, the study required data on both the frequency of use and perceived effectiveness of various strategies employed by flood victims. Respondents provided information on coping strategies such as reliance on religious practices, social support, avoidance behaviors, and professional counseling. These were measured using Likert-scale responses to capture both intensity and perception of effectiveness. Additionally, qualitative data from interviews with community leaders and healthcare providers provided insights into culturally specific coping strategies and barriers to effective coping. Such mixed data sources are recommended in coping research to capture both behavioral

patterns and contextual influences (Folkman & Moskowitz, 2004).

Indicators for Measuring Mental Health Conditions in the Absence of Formal Mental Health Services

In many flood-prone and resource-constrained settings, formal mental health diagnostic services are often unavailable. As a result, researchers and healthcare providers rely on symptom-based indicators and standardized screening tools to assess mental health conditions. This approach is widely accepted in public health research and has been validated in various low-resource contexts (WHO, 2018; Patel et al., 2018).

SUMMARY TABLE OF MENTAL HEALTH ASSESSMENT TOOLS

Tool		**Full Name**	**Components / Items**
GHQ-12		General Health Questionnaire	1. Able to concentrate 2. Loss of sleep over worry 3. Playing useful role 4. Capable of making decisions 5. Constantly under strain 6. Problem overcoming difficulties 7. Enjoy normal activities 8. Facing problems confidently 9. Feeling unhappy/depressed 10. Losing confidence 11. Feeling worthless 12. General happiness
PHQ-9		Patient Health Questionnaire (Depression)	1. Little interest/pleasure 2. Feeling down/depressed 3. Sleep problems 4. Fatigue 5. Appetite changes 6. Feeling bad about self 7. Trouble concentrating 8. Moving slowly/restlessness 9. Thoughts of self-harm
GAD-7		Generalized Anxiety Disorder Scale	1. Feeling nervous 2. Unable to control worrying 3. Excessive worry 4. Trouble relaxing 5. Restlessness 6. Irritability 7. Fear something awful may happen

PCL-5		PTSD Checklist	1. Intrusive memories 2. Nightmares 3. Flashbacks 4. Emotional distress 5. Avoidance of thoughts 6. Avoidance of reminders 7. Negative beliefs 8. Blame/self-blame 9. Negative emotions 10. Loss of interest 11. Feeling detached 12. Difficulty experiencing positive emotions 13. Irritability 14. Reckless behavior 15. Hypervigilance 16. Startle response 17. Concentration problems 18. Sleep disturbance
Perceived Stress Scale (PSS-10)		Stress Assessment Tool	1. Upset by unexpected events 2. Unable to control important things 3. Feeling nervous/stressed 4. Confidence in handling problems 5. Things going your way 6. Unable to cope 7. Control irritations 8. Feeling on top of things 9. Angered by things outside control 10. Difficulties piling up

Source: Extracted from WHO, 2018; Patel et al., 2018; Norris et al., 2002; and Fernandez et al., 2015.

To achieve the objective of determining the coping mechanisms adopted by flood victims in Ogbaru Local Government Area, the study required data on the mental health challenges experienced by respondents. These data were primarily obtained through the administration of structured questionnaires, which incorporated standardized measurement scales adapted from established mental health screening tools such as the General Health Questionnaire (GHQ) developed by Goldberg and Williams (1988). The use of such validated instruments ensured reliability and comparability of responses across respondents.

4.1 ETHICAL CONSIDERATION

This study was conducted in strict compliance to international and

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institutional ethical standards for research involving human subjects. An ethical clearance certificate was obtained from the relevant review board, prior to data collection. Informed consent was a fundamental requirement; every respondent was provided with a detailed explanation of the study's purpose, and their voluntary participation was secured through signed or thumb-printed consent forms. Given the sensitive nature of discussing trauma and mental health, the researcher emphasized the right of participants to withdraw at any stage without penalty. To maintain confidentiality and anonymity, no personal identifiers such as names or house addresses were collected, and all data were coded and stored in password-protected files accessible only to the researcher and her team (Tashakkori & Teddlie, 2010). Furthermore, the researcher remained mindful of the potential for psychological distress during the interviews. In instances where respondents exhibited signs of emotional breakdown while recounting their experiences of the 2012 or 2022 floods, the sessions were paused, and the individuals were referred to the mental health professionals at the Atani or Ossomala Comprehensive Health Centers for immediate support, ensuring the principle of confidentiality was upheld throughout the research process (World Health Organization, 2013).

5.0 DISCUSSION OF RESULTS/FINDINGS

A total of 399 questionnaires were distributed and 385 were correctly filled and returned, which is approximately 96.5% return, which is considered adequate for statistical analysis. The data collected from the respondents were presented in the form of tables as frequencies and percentages and analyzed using appropriate statistical tools.

Socio-Demographic Characteristics

This section presents the socio-demographic data from the "Questionnaire Responses" document, contextualized within the research framework of the study which evaluates the effects of flooding on the mental health of residents in Ogbaru L.G.A., Anambra State.

Table 1a: Age Distribution

Age Range	Frequency	Percentage

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< 18 years	0	0.0%
18–29 years	31	8.1%
30–39 years	141	36.6%
40–49 years	136	35.3%
50–64 years	64	16.6%
65 years & Above	13	3.4%
Total	**385**	**100%**

From table 1a, the majority of respondents (approx. 72%) fall within the active workforce age of 30–49 years, while only 3.4% of the sample population have reached the age of retirement. This demographic is crucial as they likely bear the primary responsibility for household recovery and economic stability post-flooding.

Table 1b: Gender of Respondents

Gender	**Frequency**	**Percentage**
Male	271	70.4%
Female	114	29.6%
Total	**385**	**100%**

There is a higher representation of males as 271 respondents which forms 70.4% of the total sample size being male, while only 114 respondents are female. In the context of Ogbaru, gender plays a significant role in how mental health is experienced, with literature suggesting different vulnerabilities and coping strategies between men and women. Though it would be more appreciated if both genders are equally represented, the reality as was seen in table 1b shows a fair representation of both genders as none of them can be said to be negligible.

Table 1c: Marital Status of Respondents

Marital Status	**Frequency**	**Percentage**

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Single	36	9.4%
Married	298	77.4%
Widowed	41	10.6%
Divorced	10	2.6%
Total	**385**	**100%**

From the data in table 1c, it is clear that a vast majority of the respondents are married, 298 to be precise, forming exactly 77.4% of the total sample size. 36 persons (9.4%) are single, 41 persons (10.6%) are widowed. Only 10 respondents, which represents 2.6% of the sample size, are divorced. This indicates that cadre of family status are represented as each respond differently to mental health issues arising from flood events, though with personality variations.

Table 1d: Level of Education of Respondents

Level of Education	**Frequency**	**Percentage**
None	4	1.0%
Primary	32	8.3%
Secondary	128	33.3%
Tertiary	221	57.4%
Total	**385**	**100%**

Over 90% of respondents have at least a secondary education, with 57.4% holding tertiary degrees. Higher educational attainment may influence the awareness of mental health issues and the adoption of more effective coping mechanisms, making their responses more authentic and reasonable since they should have a fair understanding of mental health issue.

Table 1e: Occupation of Respondents

Occupation	**Frequency**	**Percentage**
Farming	133	34.5%

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Fishing	99	25.7%
Public Servant	72	18.7%
Business	74	19.2%
Others/Unemployed	17	1.9%
Total	**385**	**100%**

From table 1e, it is crystal clear that Agriculture (farming and fishing) is the dominant livelihood for over 60% of respondents. This highlights severe vulnerability, as floods directly destroy crops and livestock, leading to immediate loss of income and subsequent psychological distress. Even the public servants and businessmen that make up 18.7% and 19.2% respectively are also dependent on the agricultural products, hence the effect is to all.

Table 2; Coping Mechanisms Reportedly used By Respondents

Coping Mechanism	**Disagreement (SD+D)**	**% Disagreement**	**Agreement (A+SA)**	**% Agreement**
Reliance on religious practices	25	6.5%	360	93.5%
Support from family/friends	43	11.2%	342	88.8%
Avoidance (not thinking about it)	175	45.5%	210	54.5%
Seeking professional help	364	94.6%	21	5.4%

Table 2 presents how victims attempted to manage their distress. The data collated here reveals a significant reliance on informal coping strategies. Approximately 93.5% of victims agreed that they rely on religious practices (prayer/faith), and 88.8% rely on family and social support. Interestingly, more than half (54.5%) try to use avoidance as a tactic. However, the most striking finding is that 94.6% of the

respondents disagree with having sought professional help. This identifies a massive gap between the high levels of psychological symptoms and the actual utilization of clinical mental health services.

Table 3; Mental Health Challenges experienced by Respondents

Possible Mental Health Outcomes	**Indicator**	**Disagreement (SD+D)**	**% Disagreement**	**Agreement (A+SA)**	**% Agreement**
PTSD Symptoms	Recurrent distressing memory of flood	42	10.9%	343	89.1%
	Constant worry/restlessness	31	8.1%	354	91.9%
	Hypervigilance or exaggerated startle response	73	19.0%	312	81.0%
	Flashbacks or nightmares related to flood	85	22.1%	300	77.9%
Depression Symptoms	Feeling down	58	15.1%	327	84.9%
	Feeling bad about self	71	18.4%	314	81.6%
	Thoughts of self-harm	112	29.1%	273	70.9%
	Moving slowly/restlessness	64	16.6%	321	83.4%
Anxiety	Trouble relaxing	52	13.5%	333	86.5%

Symptoms	Irritability	67	17.4%	318	82.6%
	Fear something awful may happen	44	11.4%	341	88.6%
	Feeling nervous	39	10.1%	346	89.9%

Table 3 presents respondents' reported mental health challenges across three constructs; PTSD, depression, and anxiety symptoms. Anxiety indicators recorded the highest overall agreement, with feeling nervous (89.9%) and fear that something awful may happen (88.6%) most widely reported. PTSD symptoms were similarly prevalent, with constant worry/restlessness (91.9%) and recurrent distressing memories of the flood (89.1%) showing high agreement, though flashbacks/nightmares were comparatively lower (77.9%). Depression indicators showed slightly lower overall endorsement, with feeling down (84.9%) most reported; notably, thoughts of self-harm, while still substantial at 70.9%, was the least endorsed indicator across all three constructs. These findings indicate that flood victims in Ogbaru LGA experience considerable psychological distress across all three domains, with anxiety and hypervigilance-related symptoms marginally more pervasive than depressive symptoms.

Table 4a; Effectiveness of Coping Mechanisms

Coping Mechanism	**Disagreement (SD+D)**	**% Disagreement**	**Agreement (A+SA)**	**% Agreement**
Reliance on religious practices	25	6.5%	360	93.5%
Support from family/friends	43	11.2%	342	88.8%
Avoidance (not thinking	175	45.5%	210	54.5%

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about it)				
Seeking professional help	364	94.6%	21	5.4%

Table 4b; Ranking of Coping Mechanisms by Perceived Effectiveness

Rank	**Coping Mechanism**	**% Perceived Effective**
1	Reliance on religious practices	93.5%
2	Support from family/friends	88.8%
3	Avoidance (not thinking about it)	54.5%
4	Seeking professional help	5.4%

Table 4a and 4b presents respondents' perceived effectiveness of the coping mechanisms available to them. Religious practice was rated as the most effective coping strategy (93.5%), followed closely by support from family and friends (88.8%), indicating a strong reliance on faith-based and informal social coping resources within the study area. Avoidance was rated effective by just over half of respondents (54.5%), a notably lower figure that is consistent with the literature classifying avoidance as a less reliable, maladaptive strategy. Seeking professional help was rated effective by only 5.4% of respondents the lowest of all four strategies which is unlikely to reflect the tool's clinical inadequacy so much as the near-total absence of accessible mental health services in Ogbaru LGA, a gap already established in the Statement of the Problem. These findings suggest that flood victims in Ogbaru rely almost entirely on informal, community and faith-based coping mechanisms, largely by necessity rather than by informed preference, given the limited availability of formal psychological support.

5.1 Conclusion / Recommendation

Conclusion

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This study set out to determine the coping mechanisms adopted by flood victims in Ogbaru LGA, Anambra State, and to evaluate the effectiveness of these mechanisms in managing associated mental health challenges. Findings revealed that flood victims in the study area experience considerable psychological distress, with high reported prevalence of anxiety, depressive, and post-traumatic stress symptoms most notably persistent worry, fear, and intrusive memories of the flood. In the near-total absence of accessible formal mental health services, residents rely almost exclusively on informal coping mechanisms to manage this distress. Religious practice and support from family and friends emerged as the most widely adopted and most perceived-effective strategies, while avoidance was moderately endorsed and considerably less effective, and professional help was both rarely accessed and rarely perceived as helpful a reflection of limited availability rather than limited value. Overall, the study demonstrates that flood-affected residents of Ogbaru LGA are coping with a chronic, recurring disaster largely through community- and faith-based resources, in the absence of structured psychosocial support, underscoring an urgent and largely unaddressed mental health need in the area.

Recommendations

1. **Integrate mental health and psychosocial support (MHPSS) into flood disaster response.** Agencies such as NEMA and SEMA should incorporate structured psychosocial support services not just physical relief into their standard flood response protocols for Ogbaru LGA and similarly flood-prone communities.
2. **Leverage existing informal support structures.** Given the strong reliance on religious and family/community support, mental health interventions should be designed to work through, rather than around, these trusted structures for instance, by training religious leaders and community volunteers in basic psychological first aid and referral practices.
3. **Improve access to formal mental health services.** Government and

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health authorities should expand the presence of primary healthcare-based mental health services in Ogbaru LGA, given the near-complete absence of professional support currently accessible to residents.

4. **Discourage reliance on avoidance as a primary coping strategy.** Community sensitization programs should educate residents on the limitations of avoidance coping and promote more effective adaptive strategies, delivered through trusted community channels.

5. **Conduct further research.** Future studies should build on this work by statistically testing the relationship between coping mechanisms and clinically measured mental health outcomes (e.g., via correlation or regression analysis), and by examining how socio-demographic factors such as sex, age, and education shape both the choice and effectiveness of coping strategies. An area this study was unable to address due to data limitations.

5.2 Contribution to Knowledge

This study contributes to existing knowledge in the following ways:

1. **Empirical documentation of a previously unstudied population.** This is the first study to empirically document the mental health challenges and coping mechanisms of flood victims in Ogbaru LGA, Anambra State one of Nigeria's most consistently flood-affected areas whose psychological experience had, until now, been entirely absent from the literature despite extensive documentation of the area's hydrological and economic flood impacts.
2. **Evidence on perceived effectiveness, not just prevalence, of coping strategies.** While much existing literature identifies which coping strategies flood victims adopt, this study extends that work by evaluating how effective victims themselves perceive these strategies to be, providing a more actionable evidence base for intervention design than prevalence data alone.
3. **Evidence base for context-specific psychosocial intervention design.** By identifying religious practice and

family/community support as the most relied-upon and most effective coping resources in this context and professional help as both underutilized and under-resourced the study provides local evidence that can guide humanitarian agencies (e.g., NEMA, SEMA) toward culturally grounded, rather than imported, intervention models for riverine Nigerian communities.

4. **A replicable methodological approach.** The study's use of standardized mental health screening tools (GAD-7, PHQ-9, PCL-5) alongside a structured coping-effectiveness instrument offers a replicable model for assessing coping and mental health in other flood-prone, resource-limited Nigerian communities.

5.3 AI CONFLICT OF INTEREST AND FUNDING DECLARATIONS

I IFUNANYA DYMPHNA EGBUNIWE, hereby declare that there was no conflict of interest with respect to this research/publication. No personal, financial, or professional relationships have influenced the conduct of this study.

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