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# **Rising from the Ashes**

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#### ABSTRACT

This research study explored the experiences of individuals affected by a house fire incident, focusing on the causes of the fire that completely destroyed their homes, the struggles they faced, the actions taken during and after the incident, and their recovery efforts. Utilizing a phenomenological design, six individuals from the Province of Ilocos Norte who had experienced such incidents were purposefully selected for in-depth interviews.

The analysis revealed the emergence of six key themes, namely: unmonitored situations, electrical issues, lack of means to suppress the fire, challenging situations, alternative remedies, and support received. These findings provide a comprehensive understanding of the multifaceted nature of experiences related to house fires, emphasizing the resilience of individuals in overcoming adversity and the critical importance of preventive measures and support systems in mitigating the impact of such devastating events.

Based on the findings, the researchers recommend that the Bureau of Fire Protection, in collaboration with local NGOs and community organizations, consider establishing strategically located water storage tanks across barangays to enhance fire response capabilities. Additionally, it

is recommended that community fundraising initiatives be organized to generate emergency relief funds for victims of house fires would provide essential financial support during crises. It is also proposed that barangay officials, local leaders, and volunteers receive comprehensive training in fire safety and emergency response, enabling them to assist their communities more effectively in the event of a fire. The creation of dedicated barangay firefighters within each barangay would further strengthen preparedness for fire-related emergencies. Finally, implementing communitywide educational programs focused on fire prevention, safe cooking practices, and the proper use of electrical appliances is crucial as these programs could significantly contribute to reducing the incidence of house fires and improving overall community safety.

Key words: House fire, Recovery Efforts, Fire, Life Experiences, Preventive Measures, Fire Incident, Ashes

# **CHAPTER I**

The Problem and Its Setting

#### Introduction

House fire incidents are among the most common disasters in society, often leading to significant emotional distress in addition to potential physical injuries. The loss of a home in a fire involves not only the destruction of a residence but also the loss of valuable personal items such as photo albums, important documents, and cherished objects. A home, typically a place of security, comfort, and safety, can become a symbol of vulnerability after a fire, severely disrupting the normality of daily life.

Household fires represent a societal problem (Nilson & Bonander, 2019). Experiencing a house fire is a deeply traumatic event due to the extensive damage caused to buildings and infrastructure. Fires are considered to have critical consequences for human society (Shokouhi, 2019). Victims of house fires face not only the physical aftermath but also the challenges of evacuation, relocation, and rebuilding their lives. The recovery process can be long and difficult, involving the search for temporary housing and the replacement of lost items (James et al., 2014).

Globally, fires have disastrous effects and are a leading cause of property damage, injury, and death. According to fire fatality rates in countries such as the United States, United Kingdom, Singapore, Japan, and Australia, an estimated 67,000 people die in fires annually. This figure assumes roughly one death per 100,000 individuals worldwide. In the Philippines, the number of fire incidents fluctuates each year. A report indicates that between 2017 and 2022, there were 94,399 fire incidents, averaging 15,733 incidents annually. These incidents resulted in an average of 855 fire-related injuries and 253 fire-related deaths per year. In 2023, the Bureau of Fire Protection (BFP) reported a 21.1% increase in fire incidents nationwide (Cariaso, 2023). It is evident that the victims of such fires are always the most vulnerable, regardless of the fire's cause or outcome. Numerous studies have established a detrimental correlation between fire victims' physical and emotional health. Experts have noted that these individuals often experience psychological challenges such as depression, anxiety, and stress. House fire victims are also prone to enduring psychosocial issues that manifest as long-term stress (Makwana, 2019).

Therefore, this research aimed to investigate the struggles faced by house fire victims and gain a deeper understanding of their suffering. The findings from this study could help inform the development of policies and assistance programs that can be offered by both government and non-government organizations to aid fire victims in their recovery.

# **Background of the Study**

House fires are devastating events that can have significant psychological effects on individuals who experience them. This study is intended to explore the causes of fire that completely destroyed the house of the participants; the struggles faced by the participants; the action taken by the participants; and the recovery efforts undertaken by the participants.

Understanding those individuals who experienced house fire incidents can provide valuable insights into their actions, decision-making processes, and coping mechanisms during and after the incident. Further, by exploring those who experiences house fire incidents is crucial for developing comprehensive and effective approaches to prevent and mitigate the impact of these incidents, as well as to support the recovery and well-being of those affected (McCaffrey, 2015).

In Ilocos Norte, the number of fire incidents can vary from year to year. In 2023, there was a 39% increase in fire incidents in Ilocos Norte compared to the previous year, with a total of 196 incidents recorded. This rise prompted BFP to intensify its fire prevention campaign (Austria, 2024).

On top of that is the Fire Code of the Philippines (Presidential Decree No. 1185) which provides comprehensive guidelines and regulations for fire safety in buildings and other structures, including residential homes. It covers various aspects of fire safety, such as building construction standards, fire prevention measures, firefighting equipment, and fire safety education.

In addition, the Philippine Electrical Code (Presidential Decree No. 106) establishes guidelines and regulations for electrical installations and wiring. It includes provisions specifically related to fire safety, such as requirements for proper wiring and the installation of electrical equipment. These measures ensure that electrical wiring is adequately insulated, protected from damage, and installed in ways that minimize the risk of electrical fires.

According to the National Fire Protection Association (NFPA) reports, thousands of house fires occur each year, resulting in significant property damage, injuries, and fatalities. The immediate impact includes the loss of shelter, personal belongings, and, in some cases, loved ones. The psychological shock and trauma can be profound, leading to long-term emotional and mental health challenges. Additionally, survivors often face financial hardships as they work to rebuild their lives and homes, and the environmental impact of house fires, including air and water pollution, can also be substantial.

This knowledge can inform the development of targeted interventions, support services, and fire safety education programs that address the specific needs and challenges faced by individuals affected by house fires (Recovering Emotionally after a Residential Fire, 2024).

Further, while previous research has investigated the causes and consequences of house fires, there is limited understanding of the experiences of individuals who have been directly affected by these events. The experiences, motivations, and actions of those involved in house fire events play a crucial role in determining the outcomes and impact of such incidents.

Consequently, by delving into the experiences of individuals in house fire incidents, this study aspires to achieve several objectives. Firstly, it aims to provide a platform for individuals to voice their stories, validating their experiences and fostering a sense of agency in the aftermath. Secondly, it seeks to inform support services and interventions to the unique needs of those affected by house fires and for community rebuilding efforts. Lastly, it endeavors to contribute to the broader discourse on disaster resilience and preparedness.

#### **Statement of the Problem**

This study aimed to explore the struggles of those who have experienced a house fire incident. Specifically, this study sought to answer the following questions:

- 1. What are the causes of fire that completely destroyed the house of the participants?
- 2. What are the struggles faced by the participants?
- 3. What are the action taken by the participants?
- 4. What are the recovery efforts undertaken by the participants?

#### **Theoretical Framework**

A theoretical framework is a comprehensive review of existing theories used by the researchers to explain phenomena, draw connections, and make predictions. It serves a roadmap for developing arguments in research papers or dissertations, justifying and contextualizing later research (George, 2023). Specifically, this study was anchored in three theories: Protection Motivation Theory (PMT), Fire Dynamics Theory, and the Hazard Barrier Model.

### **Protection Motivation Theory (PMT)**

This theory was developed by Rogers in 1975 and revised in 1983. According to Rogers, PMT explains how people are motivated to protect themselves when they perceive a potential danger. The theory focuses on the factors that influence whether people decide to take protective actions, like following safety guidelines, especially in response to threats.

In this study, Protection Motivation Theory (PMT) provides a framework for understanding how individuals perceive fire risks and the factors that motivate them to take action, such as implementing fire prevention measures. By examining people's responses to fire threats, PMT offers valuable insights into enhancing fire safety education and developing more effective interventions that encourage protective behaviors against fires.

# **Fire Dynamics Theory**

This theory was developed by Dr. James Quintiere, a renowned fire scientist, and his colleagues in the 1990s. This theory explains how fire behaves and spreads by looking at the physical processes involved (Quintiere, 1994). It provides people with understanding of how fires start, grow, and spread within buildings, which is crucial for improving fire safety and firefighting strategies.

In relation to this study, this theory is instrumental in understanding how a fire can rapidly spread within a home and how individuals may react during such events. By integrating knowledge of fire behavior with insights into people's experiences and decision-making processes during a fire, we can gain a deeper understanding of their actions and responses. This understanding, in turn, facilitates the development of more effective fire safety education, emergency response plans, and interventions aimed at protecting individuals during house fires.

#### **Hazard Barrier Model**

This model, also known as the Swiss Cheese Model, was introduced by James Reason in 1997.

It explains that accidents happen when multiple layers of safety measures fail at the same time. Each layer whether it's a rule, system, or physical measure works to prevent accidents. If these barriers fail one after another, a hazard can lead to an incident (Reason, 1997).

In connection with this study, this model helps explain the barriers people face in preventing house fires. These barriers can be physical (like faulty wiring), cognitive (lack of knowledge about fire safety), or socio-cultural (limited access to fire safety resources). The model suggests that by overcoming these barriers, such as improving fire safety knowledge, providing resources, and encouraging quick decision-making, individuals can better protect themselves and reduce the risk of fire accidents.

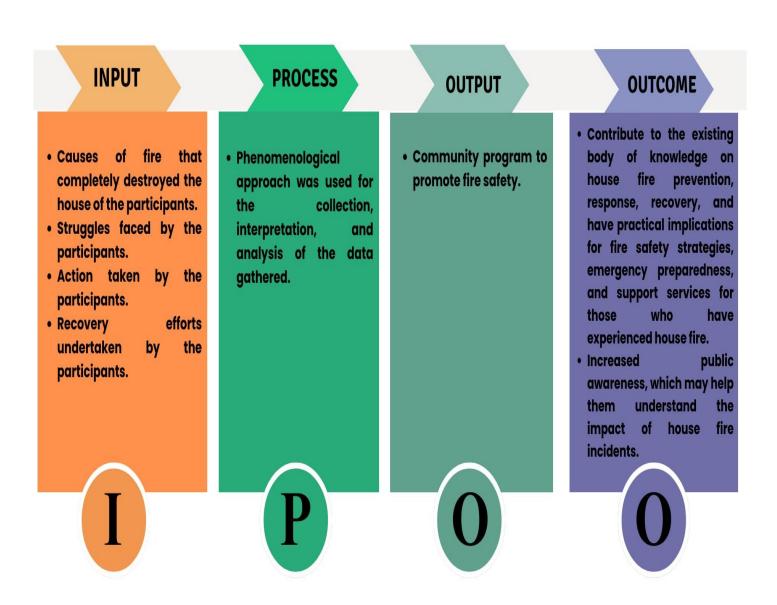
#### **Conceptual Framework**

A conceptual framework is a research tool that connects and contextualizes multiple aspects of an area of study. It serves as a visual representation to illustrate the expected outcome of the study and to fully understand the phenomena being studied.

This study adopted the Input-Process-Output-Outcome (IPOO) approach. This model established the general framework and course of action for the study, which included the four steps: input, process, output, and outcome.

The inputs comprise the following: causes of fire that completely destroyed the house of the participants, struggles faced by the participants, action taken by the participants, and recovery efforts undertaken by the participants. The process involves the phenomenological approach that was used for the collection, interpretation, and analysis of the data gathered. The output of the study is a community program to promote fire safety. The outcome aims to enhance the existing

body of knowledge on house fire prevention, response, and recovery, while also providing practical



implications for fire safety strategies, emergency preparedness, and support services for those who have experienced house fire incidents. Additionally, it seeks to increase public awareness, helping individuals understand the profound impacts of house fire incidents.

Figure 1. Paradigm of the Study

### Significance of the Study

The significance of this study lies in its aim to understand the struggles faced by individuals who have experienced house fire incidents. The findings from this research would be beneficial to several stakeholders:

*House Fire Victims:* The study could provide family members with a deeper understanding of the physical and emotional impacts that house fires can have on individuals and their families. This increased empathy could enable them to offer better support and resources to those affected, whether through counseling, financial assistance, or community outreach programs.

*Bureau of Fire Protection (BFP) Personnel:* The results would offer BFP personnel valuable insights into how to raise public awareness regarding fire prevention guidelines, address fire hazards, and improve emergency preparedness and evacuation protocols.

*Emergency Response Team (ERT):* By understanding the lived experiences of house fire victims, this study could contribute to enhancing emergency response and recovery efforts.

*Non-Governmental Organizations and Government Agencies:* Learning from the experiences of fire victims would help various agencies identify areas for more effective and efficient emergency services in responding to house fires. This includes improving communication systems, training first responders, and streamlining coordination between different agencies involved in the recovery process.

*Community:* The results of this study could raise awareness within the community about the devastating consequences of house fires. The findings could serve as a reminder of the importance of fire safety measures and encourages individuals to take proactive steps to protect themselves and their homes.

*Academia:* This study could serve as a valuable reference for educational institutions, aiding in teaching students about fire prevention and safety.

*Researchers:* The findings could motivate and assist researchers in exploring new solutions to the challenges faced by those who have experienced house fire incidents.

*Future Researchers:* Future researchers would benefit from this study as it could serve as a foundation for guidelines when investigating topics related to house fire incidents.

#### Scope and Delimitations of the Study

This study focused on exploring the causes of fires that completely destroyed the homes of the participants, the struggles they faced, the preventive measures they took during the fire incidents, and the recovery efforts they undertook.

The study was limited to six selected participants from the province of Ilocos Norte, specifically those who had experienced a house fire incident at least one year prior. Research was conducted from the second semester of the academic year 2023-2024 through the first semester of the academic year 2024-2025.

#### **Definition of Terms**

For better understanding and clarification of the terms used in this research study, the following terms were defined conceptually and operationally:

*Fire Incident.* This refers to a devastating event that results in the loss of property, injury, and even loss of life.

*House Fire.* This refers to a significant fire disruption that occurred in the residential properties of six individuals from Ilocos Norte at least one year prior the second semester of the academic year 2023-2024.

*House Fire Victims.* These refer to the six individuals who have experienced a house fire incident at least one year prior the second semester of the academic year 2023-2024.

*Preventive Measures.* These refer to any reasonable actions taken by participants in response to suppress or mitigate the impact of the fire.

Recovery Efforts. These refer to the specific actions and strategies implemented by

individuals to rebuild and restore their lives following a house fire incident.

*Rising from the Ashes.* This concept symbolizes the strength and determination individuals demonstrate as they recover from the destruction caused by a fire and begin to rebuild their lives.

*Struggles.* These refer to the challenges faced by the six individuals who experienced house fire.

# **CHAPTER II**

# **Review of Related Literatures and Studies**

This chapter focuses on the different related literature and studies that provide a more detailed and in-depth presentation of those who experienced house fire incident.

# An Act Establishing a Comprehensive Fire Code of the Philippines, Repealing Presidential Decree No. 1185 and for Other Purposes.

Section 1. This Act shall be known as the "Revised Fire Code of the Philippines of 2008." Section 2. It is the policy of the State to ensure public safety and promote economic development through the prevention and suppression of all kinds of destructive fires and promote the professionalization of the fire service as a profession. Towards this end, the State shall enforce all laws, rules and regulations to ensure adherence to standard fire prevention and safety measures, and promote accountability for fire safety in the fire protection service and prevention service. Section 5. Responsibility for the Enforcement of this Code. - This Code shall be administered and enforced by the Bureau of Fire Protection (BFP), under the direct supervision and control of the Chief of the Bureau of Fire Protection, through the hierarchy of organization as provided for in Chapter VI of Republic Act No. 6975. With the approval of the Secretary of the Department of the Interior and Local Government (DILG), the BFP (Bureau of Fire Protection, 2019).

#### **Local Fire News**

# Fire in Sta. Cruz, Manila

A massive fire broke out in a residential area at Santa Cruz, Manila, causing significant damages estimated at P3.7 million on a Friday afternoon. According to a report by Jamie Santos on "Saksi," the blaze, located at Tomas Mapua corner Lope de Vega, resulted in almost zero visibility due to thick smoke, leading to minor health complications for at least five residents. The fire, fueled by wooden materials and strong winds, spread rapidly, leaving many residents unable to save their belongings as they fled the area. The intensity of the blaze prompted the suspension of classes at a nearby maritime school, ensuring the safety of over 100 students.

A fire broke out in a house, causing dizziness, vomiting, and injuries to residents. Fire fighters declared the blaze under control and extinguished it by 6 p.m., ensuring safety for affected residents and nearby students. The incident was not fatal (GMA News Online, 2024).

#### **Talisay Fires**

Three separate fires in Talisay City, Cebu over the past two days have resulted in significant losses, including the tragic death of a 68-year-old Swedish national. The fatal incident occurred during a fire at a two-story house within a compound in Barangay Isidro on Thursday evening, April 4, 2024. The blaze, which started around 7:03 p.m., swiftly engulfed the house, leading to the arrival of firefighters just three minutes later. Unfortunately, despite their efforts, the house was completely destroyed, resulting in close to P2 million in property damages. The fire primarily affected one family consisting of seven individuals, leaving behind a devastating aftermath.

The Swedish national's loss in fires has highlighted the need for improved fire safety measures and community awareness. The estimated cost of property damage is P1,680,000, emphasizing the importance of vigilance and preparedness to mitigate risks and prevent future tragedies (Inquirer Net, 2024).

# **Quezon City Fires**

The fire in Quezon City has rendered approximately 300 families homeless. It originated on the third floor of a shanty in Barangay San Roque, spreading swiftly due to the lightweight materials of the structures. Arson investigators are currently probing the cause of the blaze. Fortunately, there have been no reported injuries. Efforts are underway to assist those affected, including relocation to evacuation centers for temporary shelter (Tupas, 2024).

#### Perception and Recollection of Fire Hazards in Dwelling Fires

Dwelling fires are the primary cause of both fatal and non-fatal fire-related injuries in the UK and many other parts of the world. They also result in significant property damage and psychological distress Despite this, the scientific community has paid disproportionately little attention to house fires and, in particular, human behavior during dwelling fires for a number of decades.

A qualitative study found that most residents who survived fires suffered injuries while trying to put out the fire differentiated between non-fatally injured and uninjured residents, indicating that occupant action, failure to recognize risk, or voluntary risk-taking near fires are the main causes of non-fatal injuries

More study is needed to understand occupant behaviors during housing fires and their connection to injury status. Assessing risks and behavioral responses requires assessing people's ability to perceive and recall fire hazards accurately.

Two studies show that individuals can recall initial hazards from home fires, including flame size and smoke size, even after a delay. However, when tools and hazards are visualized, hazard size recall becomes more relevant (Hulse, et al., 2020).

#### Urban Fire Risk Control: House Design, Upgrading and Replanning

House densification, a result of urbanization, is a process that can be found in both planned and uncontrolled urban settlements in emerging nations. The dangers of a fire tragedy are increased by this densification, which restricts fire brigades' access to populated areas. In this research, we evaluate the dangers and exposure to fire in homes located in the unofficial neighborhoods of Dar es Salaam City, Tanzania's Mchikichini District.

In addition to observations and measurements of house transformations, spatial quality, and indoor real life, researchers rely on interviews with residents and government officials to gather background information on the frequency and causes of fire accidents, policy provisions and regulations, experiences with fire outbreaks, and coping mechanisms.

Results imply that improper structural features and bad behavioral habits both increase the danger of fire. This includes residents using unsafe electricity methods, residents' inability to put out flames once they start, residents' restricted access to buildings for firefighting equipment due to planning restrictions being broken, and residents' lack of awareness on the part of local government authorities regarding the seriousness of fire dangers.

Installing firefighting systems, limiting cooking to designated areas, using safer energy sources for cooking and lighting, enhancing vehicle access routes to neighborhoods, developing grassroots capacity, and establishing community-based fire risk management are some potential changes to lower the risk of fire in the settlement (Mtani & Mbuya, 2018).

# In the Heat of The Moment: A Local Narrative of The Responses to a Fire in Lærdal, Norway

Three fires occurred in three different areas in Norway in January 2014 during the span of eleven days: Laerdal, Flatanger, and Frøya. By Norwegian standards, all three of the fires have been classified as significant due to their complexity or effect, making them some of the biggest fires Norway has seen in recent memory. The media focused most of its attention on the fire in Lærdal. There were 4000 articles written on the fire in just 13 days.

The selection of a single case study was done with the intention of delivering contextdependent knowledge as a learning tool rather than one that can be generalized. This is not like any other scenario. Even if there were three fires in Norway in January 2014, it is not possible to say that fires of that size are common in Norway. Furthermore, on the night of the fire, telecommunications and electricity supplies failed exclusively in Laerdal.

The Laerdal fire and its rapid spread, local reactions to the fire, how people responded in the absence of electricity and telecommunications, and how people improvised in the case of the liquid manure spreaders are the themes that organize this section, which presents the dominant local narrative of the fire and the responses to it.

According to the investigation, the building of the prevailing local story was influenced by three elements. The first has to do with how people view what caused and how the fire turned out. The focus was on the possibility that things could have turned out much worse because of what was seen to be the difficult situation, rather than what could have been done better (Andresen,

2017).

# The Fire Victims Dilemma

All victims and their immediate family experienced an interpersonal disaster which this topic acknowledged. The loss of property caused them to feel anxious and worried. They had been putting a lot of effort into buying their homes, businesses, and assets, but all was destroyed in an instant. Their concerns were their everyday need for survival. Severe emotional suffering can result from residential fires. In addition to losing the house in a fire, many other expensive items, including important documents and emotional items, are also lost. Disasters like fires have a significant negative influence on mental health, increasing the risk of PTSD, sadness, anxiety, and other mental health issues repercussions.

The research design utilized in the study was qualitative, namely the transcendental phenomenology technique developed by Moustakas. This method entails examining and comprehending the interpretations that people or organizations make of the social or human issue.

Based on the results of the study, during their individual in-depth interviews, the eight

willing research participants were asked to recount, characterize, and discuss their experiences as fire victims. Four significant themes emerge: 1) the community's overwhelming support; 2) the family situation's uncertainty and worry; 3) shame and accountability for the occurrence; and 4) a firm belief in God.

The report recommends intensifying fire safety programs, especially in neighbourhoods, and establishing volunteer local fire departments with on-going training. It acknowledges financial support provided to fire victims but emphasizes the need for psychological evaluation and intervention programs, especially for children, to reduce damage. It also emphasizes the importance of reviving traditional Filipino attitudes like Bayanihan and strong faith in God (Creswell, 2014).

#### Analysis and Forecasting of Fire Incidence in Davao City

A fire can cause fatalities, serious injuries, and damage to personal belongings. It poses a serious risk to both life and property. Fire incidents can be caused by a variety of things, including poor quality products, malfunctioning smoke alarms, cigarettes left on combustible surfaces, and wiring issues.

According to the Bureau of Fire Protection in Davao City, there were 35% more fire incidents in the first quarter of 2018 than there were in the same period the previous year (2017). In order to minimize financial loss and human casualties, it is crucial to understand the trends and regularities of fire incidents and to implement fire preventive countermeasures as soon as feasible.

The Bureau of Fire Protection - Region XI office, situated at Alvarez Street and Monteverde in Davao City, provided the datasets used in this study. The monthly fire incidence in Davao City is analyzed and forecasted using the Box-Jenkins method or the ARIMA family of models. Model identification, model or parameter estimate, and diagnostic testing are the three iterative phases of the approach.

The period between 2015 and 2016 is when the largest fire incidents occur. During

brownouts, unattended burnt-out candles in urban residential houses are mostly to blame for them. El Niño-induced lower water levels at hydropower sources and big power plants undergoing preventive maintenance are the main causes of brownouts. A significant fire in a church staff home in Davao City's Poblacion neighborhood claimed the life of a pastor. The majority of large fire incidents in 2016 occurred in crowded, heavily populated urban housing. The Bankerohan Public Market has experienced one significant fire.

According to the analysis, there are no trends or seasonal patterns in the historical data on fire incidents, suggesting that the incidence of fires in the city has not been rising or falling over time. A steady decline in a negative event, such as the frequency of fires, is an idealistic goal since it would eventually lead to zero cases. However, a steady rise in the number of fire incidents is a serious issue and calls for quick action to lessen the tragic loss of life and property. Davao City's fire incidents might not always increase over time, but they also might not always go away on their own. Therefore, creating plans, initiatives, and regulations is essential to reducing the risk of fire or preventing it from starting in the first place (Villa & Ceballos, 2021).

#### **Electrical Fire in Bislig City, Philippines**

Unexpected malfunctions and failures, such as short circuits, overloads, arcing, a unplugging gadgets like televisions, can result in electrical fires in homes and other electrical materials. Electrical ignition is progressively turning into a significant problem as seen by the greater percentage of electrically connected fires—5,366 out of 19,292 fire events—which is equal to 27.81% of all fire occurrences in the country in 2018. Using incompatible plugs and outlets can lead to sparks, which can indicate serious issues like short circuits, moisture, aging materials, and poor repairs. Sparks can also start a fire due to the presence of combustible materials nearby. Unplugging appliances, even when not in use, increases the risk of an electrical fire. It is crucial to unplug televisions and leave appliances like heaters on and forgotten.

In relation to the study, this approach is a self-made questionnaire was used in this

randomized study to collect vital data on respondents' understanding of the three main components of domestic electrical fire prevention: practice, awareness, and behavior. The respondents were divided into three categories based on the kind of construction of their homes: wood, semiconcrete, and concrete. The respondents' responses to each important component were quantified using a descriptive manner, and the average results were compared and understood appropriately.

The study found that common electrical fire hazards include improper ampere usage, inferior wires, and uninspected home wiring. Respondents also lacked knowledge about residential safety measures and electrical fires, with their home wiring not being inspected regularly. They only slightly adhered to basic safety precautions against home fires, indicating a lack of awareness and understanding of these issues.

Based on the findings and conclusion, participating in evaluation and assessment activities supported by local authorities in Bislig City can improve practice levels. Respondents should be trained on obtaining electrical permits for home wiring adjustments and developing a structured household routine on electrical fire protection. Children should be taught safety measures, prioritize tasks, and the importance of fire extinguishers (Lee et al., 2016).

#### **Electrical Post Fire as Cause of Fire Incidents in Region VI, Philippines**

Electrical fire incidents are the primary cause of economic impact in the Philippines and other nations, with Dubai having the highest incidence. The United States, the UK, and Japan have the highest rates of residential fires. Electrical fires are caused by current problems, overheated wirings, motors, appliances, and plugs in close proximity to combustible materials. They are the primary cause of fire events in Region VI, causing significant property damage, psychological and physical harm, and fatalities due to factors like defective items.

The study analyzed electrical fire incidents in six Region VI provinces using secondary data from the Bureau of Fire Protection's records. Fire inspectors and arson detectives participated in structured interviews to determine causes. Statistical methods like frequency count, percentage, mean, and one-way ANOVA were used to identify significant differences. Based on the results of the study, the interview with Region VI fire safety inspectors and arson investigators revealed that common causes of electrical fire incidents are accidental, building owners' negligence, overloading, and unnoticed overheating, emphasizing the importance of electrical competencies in fire safety.

Based on the findings and conclusion, electrical fires are caused by short circuits, faulty connections, overheating, and sparks. Province-wide causes include Aklan, Antique, Capiz, Guimaras, Iloilo, and Negros Occidental, with electrical fans being the most involved (Occeno, 2016).

#### СНАРТЕВ Ш

### **Research Methodology**

This section presents the research design and methodology employed in this study, population and locale of the study, data gathering tool, data gathering procedure, treatment of data, and ethical considerations.

#### **Research Method and Design**

This study employed a qualitative research approach. Qualitative research involves the collection and analysis of non-numerical data to gain a deeper understanding of concepts, opinions, or experiences. It is particularly useful for gathering in-depth insights into a problem or generating new ideas for further research (Bhandari, 2020). In this study, qualitative research was utilized to explore the struggles, perceptions, ideas, and opinions of individuals who have experienced house fire incidents.

The study specifically adopted a phenomenological design. This design focuses on studying human experiences (Creswell & Creswell, 2018). By using phenomenological design, the

researchers aimed to gain a comprehensive understanding of the perspectives, experiences, and realities of participants who had encountered house fire incidents.

#### Population and Locale of the Study

he six participants in this study were individuals who had experienced house fire incidents in the Province of Ilocos Norte. Specifically, the participants were selected from the following locations: one (1) from Brgy. 23 Paterno Street, Laoag City; one (1) from Brgy. 30 Baoa East, City of Batac; one (1) from Brgy. Dariwdiw, City of Batac; one (1) from Brgy. 3 San Pedro, Vintar; one (1) from Brgy. 22 Boyboy, Piddig; and one (1) from Brgy. Manalpac, Solsona.

The selection criteria for participants included: a) having experienced a house fire incident, b) having their homes completely destroyed, c) having experienced the fire at least one year ago, and d) currently residing in the Province of Ilocos Norte.

Purposive sampling was employed in this study, a technique used in qualitative research that involves selecting participants based on specific characteristics relevant to the research topic (Palinkas et al., 2015). This approach was utilized to gather targeted information and data from participants, as the primary aim of the study was to gain insights into their experiences related to house fire incidents.

### **Data Gathering Tool**

The interview guide consisted of questions directly related to the problems and objectives of the study, specifically addressing: the causes of the fires that completely destroyed the participants' homes; the struggles faced by the participants; the preventive measures taken during the fire incidents; and the recovery efforts made by the participants.

The researchers employed semi-structured interviews as the primary data collection method, utilizing open-ended questions to encourage participants to freely express their thoughts and experiences. To ensure accurate documentation and maintain the integrity of the data, both voice and video recorders were used throughout the interviews, providing a reliable record of the information shared by the participants. Additionally, the interview guide was validated prior to the study to ensure that the questions were clear, relevant, and aligned with the study's objectives, thereby enhancing the validity of the data collected.

# **Data Gathering Procedure**

Data gathering was essential and required careful planning, including the steps taken to collect information that would provide insights into the struggles faced by individuals who had experienced house fire incidents.

The researchers formulated an interview guide with the assistance of their research adviser. They also drafted a formal request letter to their research adviser, which was validated by the Guidance Counselor. Once the tool was approved and validated, the researchers visited the participants to explain the purpose of the study, allowing them sufficient time to respond to the questions. All interviews were conducted in the preferred language of the interviewees to ensure effective communication.

After collecting the data, the findings were interpreted and analyzed. Furthermore, the information gathered from the participants during the interviews was treated with the utmost confidentiality, accessible only to the researchers and the research adviser, and was not disclosed to any unauthorized individuals.

# **Treatment of Data**

The researchers employed thematic analysis to systematically organize and evaluate the complex dataset, which involved interpreting and reviewing transcripts from in-depth interviews.

Thematic analysis is a qualitative data analysis method that entails reading through a dataset to identify patterns in meaning and discern themes, requiring active reflexivity, where the researcher's subjective experience plays a crucial role in interpreting the data (Villegas, 2023).

The analysis consisted of six steps: data familiarization, initial coding, searching for

themes, defining themes, reviewing themes, and reporting. During data familiarization, the researchers organized and transcribed the data collected from individuals who had experienced house fire incidents through interviews and audio recordings. In the initial coding phase, relevant codes related to the research questions were generated from the transcripts. The subsequent search for themes involved grouping the codes according to their unifying features.

After defining the themes with clear definitions and refining them for specificity, the researchers reviewed the themes to ensure their relevance to the entire dataset. Finally, they created a clear and analytical report summarizing the findings from the data.

#### **Ethical Considerations**

Ethics in research encompass a set of principles that guide research design and practices (Bhandari, 2021). This study highlighted key ethical considerations when involving participants' lived experiences, including informing participants about the study's purpose, potential risks, benefits, and duration, ensuring they understood that participation was voluntary and that they could withdraw at any time without penalty. Informed consent was obtained by having participants sign a consent form confirming their agreement to participate. The researchers ensured confidentiality by safeguarding participants' identities and securely storing the data. Lastly, they ensured that all participants were treated fairly and with respect throughout the study.

#### **CHAPTER IV**

# PRESENTATION, INTERPRETATION, AND ANALYSIS OF DATA

This chapter focuses on presenting the data gathered from the participants as well as detailing the codes and themes that emerged from their answers. It also includes the interpretation and analysis of the collected data.

### **Causes of Fire that Completely Destroyed the House**

The causes of fire are factors that create conditions leading to the uncontrolled spread of fire. These causes may include electrical malfunctions, cooking-related accidents, or other incidents that ultimately result in significant damage or complete destruction of property. This section of the research study discusses the causes of the fires that completely destroyed the homes of the participants.

### **Unmonitored Situations**

Unmonitored situations refer to conditions where children are left without adequate adult supervision in an environment with potential dangers, such as active embers, fireplaces, or other hazards that could result in accidental fires. In this study, participants claimed that unmonitored situations are one of the causes of fires that completely destroyed their homes. This assertion is supported by the statement of Participant Number 1, who noted:

> "Nagtalsik jay biggang, ta tay apokok siak kunana met."

(The embers from the coal splattered, and my grandchild insisted on handling them.) Participant number 2 also supported this theme, claiming: "Idi nauram jay balay min, jay yanti kusina adda gamin ubbing idi nga nagtuno ti mais jak met expectaren nga ipangato deyti apoy."

(When our house burned down, it started in the kitchen where some kids were grilling corn; I never anticipated that the fire would escalate.)

Participant number 4 further supplemented the theme, stating:

"Adda na rigsak nga biggang, ta tay balay ko ket tinidtidda nga kayo, ti dadduma kawayan, alisto nga nagwarasen."

(There were embers from the coal, and since my house was constructed from leftover wood and bamboo, the fire spread easily throughout the area.)

Even seemingly innocuous sparks left unattended can ignite disastrous flames (RMN Networks, 2017). Furthermore, local news reported that the fire, fueled by wooden materials and strong winds, spread rapidly, leaving many residents unable to save their belongings as they fled the area (GMA News Online, 2024).

Moreover, a study on accidental dwelling fires in Great Britain indicates that the misuse of appliances, particularly cooking equipment, is a significant contributing factor. Vulnerable populations, such as children and the elderly, are at an elevated risk (Mytton et al., 2017). It is noted that unmonitored situations are one of the causes of fires that have completely destroyed the homes of the participants, particularly due to the risk posed by children in the kitchen, as they often lack the necessary knowledge and understanding of fire safety during cooking or grilling situations. This risk can be easily underestimated, especially since some participants' homes are built from lightweight materials, which allows these embers to rapidly escalate into serious fires.

#### **Electrical Issues**

Electrical issues refer to inherent dangers and risks associated with electrical systems. Such failures can lead to fires or explosions, posing serious threats to life, property, and the overall safety of an environment and its occupants (Tarlengco, 2018). In this study, electrical issues pertain to the failures and malfunctions of electrical systems that cause devices or appliances to not function properly, ultimately leading to house fires. This is supported by the statement of Participant Number 3:

> "Ti findings ti Bureau of Fire Protection ket overload, adu gamin isaksaksak na baterya ti electric bike kada TV."

(The findings from the Bureau of Fire Protection indicated that there was an overload caused by numerous devices being charged, such as electric bike batteries and televisions.)

Participant Number 5 further reinforced this theme by asserting:

"Kuryente, adda gamin mesa bakante nga kwarto tas adda waya nga aggilap-gilap idi iso baka nginetnget ti bao." (Electricity, there's a vacant room, and a wire that kept flickering – likely due to a mouse chewed on it.

Participant number 6 further supported the theme, citing:

"Based kadijay immuna nga naduktalan dagijay BFP ket about kan jay kuryente, which dijay waywaya ket daanen."

(Based on the findings of the BFP, it was about the electricity, and the wire was already old.)

According to Occeno (2016), arson investigators revealed that common causes of electrical fire incidents include accidental occurrences, building owners' negligence, overloading, and unnoticed overheating, which emphasizes the importance of electrical competencies in fire safety. Furthermore, unexpected malfunctions and failures, such as short circuits, overloads, arcing, and unplugging gadgets like televisions, can result in electrical fires in homes and with other electrical materials (Campbell, 2019).

Consequently, homeowners' negligence, such as poor maintenance of electrical systems and ignoring warning signs, significantly increases the risk of fires. Overloading circuits by using too many devices on a single outlet or improperly connecting high-wattage appliances can lead to overheating and potential ignition. Moreover, the absence of proper inspection of the wiring can result in unnoticed overheating, particularly when equipment operates continuously for extended durations. These oversights can create hazardous conditions, as even minor electrical issues can quickly escalate into serious fire risks.

### **Struggles Faced by the Individuals**

Individuals who have experienced a house fire often face multifaceted struggles, including the recovery and rebuilding of their lives. These various challenges encountered by the participants can disrupt not only their daily routines but also their sense of safety and security. This portion of the study presents the struggles faced by the participants during and after the incident.

### **During the House Fire**

# Lack of Means to Suppress the Fire

Lack of means to suppress the fire refers to an inability to control or extinguish a fire due to inadequate tools, resources, or materials, such as insufficient access to water and difficulty for firefighters to reach the location. In this study, the lack of means to suppress the fire was a critical factor that contributed to the rapid spread of the flames. Due to insufficient resources, such as limited access to a water supply, the fire quickly escalated beyond control.

This was supported by the statement provided by Participant Number 2, who stated:

"Jak met expectaren nga kasjay ti mapasamak, madi makastrek ti BFP, dagitay la waterpump mi ti inus usar mi idi, timba kasjay."

(I did not expect that this would happen; the BFP could not enter, and the only thing we used were our water pumps, just like buckets of water.)

Participant number 3 additionally supported the theme, underscoring:

"Narigat mi nga sebseban, nagbumba dagitay manugang ko, nagtimba, siak ti para iwarsi, awan di mi kaya talaga, ti la baba ti medyo na save ko ngem awan, nauram met."

(It was hard for us to handle the fire. My in-laws were pumping water, and I was the one carrying it to pour, but we really couldn't manage. The only thing I was able to save was a little bit, but it got burned down.)

In addition, Participant number 4 stated:

"Ti nagkwaan mi idin a ket tay pinagsilpo mit hose lalo ket detuy dalan mi ket narigat, sa haan met makayanan detuy danum mi a ta bassit metla aglalo ket karigat iti danum."

(We tied the hose, but due to the narrowness of the road, the situation became even more challenging. We were unable to effectively manage the water supply, as it was limited, making it difficult to bring in enough water.)

Among the displaced is Maricris Rusiana, who tearfully sorted through the remnants of her burnt home, lamenting that nothing remained— not even one piece of clothing (Mcodilla, 2014).

Additionally, it is emphasized that the unavailability of fire suppression tools or proper equipment significantly increases the likelihood of fire spread and related casualties (Fahy et al., 2016). The inability to save personal belongings during a house fire is a significant complicating factor, largely due to the lack of means to suppress the fire, such as limited water supply. In the face of an immediate fire threat, insufficient resources to control the blaze often prevent participants from retrieving essential items, such as important documents, money, or cherished possessions. This lack of suppression resources exacerbates the situation, leading to not only the physical destruction of homes but also leaving participants feeling helpless and overwhelmed.

#### After the House Fire

#### **Beggared Situations**

A beggared situation occurs when individuals or communities lose essential resources due to unforeseen events, such as a house fire. In such cases, they lack the means to sustain themselves and seek assistance from those with greater resources, often requesting money, food, or shelter (Kürker, 2014).

In connection to this study, the beggared situation can complicate recovery efforts, particularly when individuals are unable to access essential items necessary for daily living. This was supported by the statement provided by Participant Number 1, who stated:

> "Awan lat awan, awan pungan mi, awan ules mi, awan ikamen mi, awan bado mi, awan isuot mi pulos, awan paglutwan mi, awan bagas mi, awan pay nga pagiddaan min."

(We had nothing. We had no pillow, no blanket, no mat, no clothes. We had nothing to wear, nothing at all. We had no cooking space, no rice. We had nowhere to sleep.)

Participant number 2 further reinforced the theme by underscoring:

"Ket awan ti makan, awan ti pulos ngarud ngem adda met napanan mi nga nagpatpatulongan, timmulong met ti barangay nangted da ti arwaten mi kada dadduma nga financial."

(We had no food at all, but we went to where we could find help. The barangay also assisted us by providing clothes and other financial support.)

Participant number 3 supplemented the theme:

-	"Naawanan nak trabaho, awan
	kwarta min, imbag ta ado ti
	tummulong nga concern citizen,
	awan pay pagyanan mi."

(I lost my job, we had no money; however, I am grateful that many concerned citizens

offered their assistance, though we still have no place to stay.)

Participant number 4 also mentioned:

"Ti rigat a ket awan ti arwaten mi, awan pulos, ti lang nabati nga adda kanyami ket detuy arwat mi." (The struggle was not having clothes; we had nothing left except the ones we're wearing.) In addition, participant number 5 stated:

> "Awan lat di awanen ta nauram amamin, mayat a ta adda immay nagited ti tulong."

(We had nothing left as we've lost everything, but it's a relief that people came to help.) Furthermore, participant number 6 claimed:

> "That time kase ket graduation mi pay jak pay kuma kayat mapan agmarcha kase pati tay togak ken jay picture ko napuoran idi."

(At that time, it was our graduation, and I did not wish to attend our ceremony, as both my gown and my photograph were burned.)

With over 1,100 fire victims displaced, they will need to rely on their own resources and donations for food, clothing, and basic necessities (Mcodilla, 2014). Moreover, Ahrens (2021) indicated that uninsured households are disproportionately affected, as they lack the resources to rebuild, deepening their state of poverty and leaving families in financial distress.

After the house fire, the participants found themselves in a beggared situation, devoid of basic necessities such as food, clothing, water, and shelter. This state of deprivation was one of the major struggles faced by the participants in the aftermath of the fire. The sudden loss of their

homes and possessions left them in a vulnerable and desperate condition, underscoring the urgent need for immediate assistance and support to address their fundamental needs.

#### Action Taken by the Individuals

Action taken are the specific techniques and strategies undertaken by the individuals to minimize or to reduce the risk in the event of house fire, which may include the use of fire extinguishers available such as wet blankets, water pump, and the used of buckets of water. This part of the study discussed the preventive measures undertaken by the individuals during the house fire incident.

#### **Alternative Remedies**

Alternative remedies or methods of suppression typically refer to non-traditional approaches or home-based precautions that may help prevent or manage small fires. These may include using a bucket of water or a wet towel to smother flames, which are simple yet effective techniques commonly employed in home settings to prevent escalation (National Fire Protection Association, 2024).

In relation to this study, having alternative suppression or remedies highlights the importance of how it can help the community respond better in the events of fire.

As Participant number 1 cited:

"Nagayab nak ti karrubak nga mangala da iti timtimban tapnon sebseban bassit tay apoy, ta pangur-urayan mi tay bombero ta tapnon malappedan bassit tay uram." (I sought assistance from my neighbors to get a bucket to help extinguish the fire, which allowed us to manage the situation until the firefighters arrived to fully extinguish it.)

Participant Number 2 further stated that::

"Dagijay ubbing kon napan da idi nagpaandar water pump; nangbasa kami tay ules inyap-ap mi ayan tay tuktuk ngem awan, di mi latta naana a ta syempre pan-aw met daydi atep jay balay mi gamin dikad alisto."

(My children went to start our water pump, and we soaked the blankets we had and laid them on the roof. However, it was still not enough because the roof is made of *pan-aw* which was easily flammable.)

Lastly, Participant number 4 added that:

"Timba met a ngem, tay waterpump nga kwa perdi pay ketdin, isu inyalak ti jetmatic."

(It was buckled, but the water pump was still broken, so I had to use the jetmatic instead.)

According to Patel (2022), traditional methods such as keeping buckets of water or sand in strategic locations remain reliable for small fires.

Furthermore, thick and non-flammable materials, such as emergency fire blankets, can wrap around the fire, depriving it of oxygen and extinguishing the flames. These materials are essential for quick access during emergencies (Gonzalez & Harper, 2022).

The study emphasizes the significance of taking proactive measures and employing alternative remedies to manage fires prior to the arrival of professional assistance, highlighting the essential role that community members play in the initial containment of fires. Additionally, the study underscores the delayed response of the Bureau of Fire Protection (BFP) in addressing fire incidents, emphasizing the need for more prompt intervention to support community efforts.

#### **Recovery Efforts Undertaken by the Individuals**

Recovery efforts are the actions taken to restore life and stability after a fire has occurred. These efforts may include seeking financial support, fostering motivation to confront the challenges that arise, and retrieving essential belongings. The purpose of recovery efforts is to address immediate needs and begin the process of rebuilding after the fire.

This section of the research explores the recovery efforts undertaken by individuals following the house fire incident.

# Support Received

Support received refers to the assistance and help provided to individuals and families affected by events like house fires, including financial aid, housing, food, and counseling services (American Red Cross, 2020).

In this study, this community support showcases the strength of community bonds and highlights the importance of coming together in times of crisis to demonstrate compassion and support.

The statement made by Participant number 1 supports this theme:

"Nagpatulong nak kadagitay tattao tapnon masulbar ti rigat mi ta nu hannak agpatulong awan rigat la ti rigat." (I sought help from the people, so we could resolve our difficulties, because if I don't ask for assistance, there will be no relief from our struggles.)

Participant number 2 added that:

"Nalaslasatan min agijay ado nga tultulong"

(We were overwhelmed by those many assistance)

The statement of Participant number 4 also supports the theme, mentioning:

"Pinagyamanak laeng dagitoy karkaruba kasla bayanihan lang, haan da nag papatandan kasla tulong da laeng kanyak, amin daytay pinakaaramid amin-amin nga balay ko."

(I am grateful for these neighbors; it feels like a bayanihan spirit. They did not expect anything in return; their help is simply for me in rebuilding my house.)

Additionally, Participant Number 5 supported the theme, stating that:

# "Adu timmulong, immay nagited ti

# tulong."

(Numerous forms of help were provided to us.)

Participant number 6 further supplemented the theme by saying:

"Adu ti timmulong nga classmates, teachers ko tapos tinulungan nak dagiti kapwa INC'k then dagijay idtuy barangay tinulungan dakami tapno makarecover."

(Many of my classmates and teachers extended their assistance to me, and in turn, I received support from my fellow INC members. Additionally, the individuals in this barangay provided help, enabling us to recover.)

The neighbors demonstrate their support for one another by providing lodging to the exhausted family and contributing furnishings to help them reassemble their home. Moreover, solidarity is distinct from mere reciprocity—the act of returning favors in kind—and from unconditional altruism, which involves assisting individuals in need without any expectation of return (Schiavon, 2017).

This study highlights how succor can arise in the aftermath of a house fire, underscoring the strength of community bonds and the role of faith in God during the recovery process. In times of crisis, such as when a neighbor endures a devastating loss, the collective response of community members often serves as a source of comfort and support. This succor may take various forms, such as providing temporary shelter, offering meals or clothes, or assisting with faster recovery efforts. These actions not only aid those affected but also cultivate a sense of connection, belonging, and reliance on faith in God for healing and restoration within the community.

#### **CHAPTER V**

#### SUMMARY, CONCLUSION, AND RECOMMENDATIONS

This chapter presents the summary, conclusion, and recommendations of the study regarding the struggles faced by those who experienced a house fire incident.

#### **Summary**

The findings reveal that individuals affected by house fires encounter substantial challenges that profoundly disrupt their lives and livelihoods. To obtain a deeper understanding of their experiences, the researchers analyzed the underlying factors contributing to the occurrence of house fires and explored the struggles faced by the affected individuals during and after these incidents. The study showed that the factors leading to the complete destruction of their houses were primarily caused by unmonitored situations and electrical issues. The struggles faced by the affected individuals were framed by two major themes: lack of means to suppress the fire, where participants lacked adequate materials like fire extinguishers or accessible water sources to contain the fire, and beggared situations, in which victims were left without essential resources such as food, clothing, water, and shelter. Additionally, in the absence of immediate formal resources, participants utilized alternative remedies to manage the situation. In response to these challenges, the study found that participants relied heavily on support received, receiving assistance from community members, relatives, and local organizations. This support played a crucial role in helping individuals rebuild their lives and regain stability. The study underscores that despite the hardships, the affected individuals' demonstrated resilience, showcasing their ability to recover and adapt with the support of their communities. Furthermore, it emphasizes the critical role of awareness, preparedness, and assistance in overcoming the aftermath of a house fire.

# Conclusion

In conclusion, individuals who have experienced a house fire face a complex array of challenges that extend far beyond the immediate loss of their homes. The traumatic event not only disrupts their daily lives but also tests their resilience and ability to recover. Yet, despite the overwhelming burdens they endure, these individuals display extraordinary strength, determination, and unwavering courage to rebuild their lives from the ashes. Their journey of recovery is profoundly shaped by the support of their communities, which serves as a cornerstone in their healing process. Ultimately, their experiences stand as a powerful testament to the resilience of the human spirit, showcasing an inspiring capacity to overcome some of life's most profound and daunting adversities.

#### Recommendations

From the aforementioned findings and conclusion, the following are hereby recommended:

- Create water storage tanks strategically located throughout barangays, in collaboration with the BFP, local NGOs, and community groups, specifically designed for fire response.
- Organize community fundraising initiatives dedicated to emergency relief funds for house fire victims.
- Train barangay officials, local leaders, and volunteers in fire safety and emergency response to effectively assist their communities.
- Establish Barangay Fire Fighters in every barangay to enhance fire emergency preparedness.

• Implement community programs to educate residents about fire prevention, safe cooking practices, and the proper use of electrical appliances.

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