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The Effect of Social Capital on Individual Disaster Resilience: The Mediating Role of Fear of Crime *

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Abstract



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Disaster resilience is a multifaceted and complex concept influenced by factors such as a society's level of development, sociodemographic characteristics, vulnerability, disaster awareness, disadvantaged groups, and social capital. Social capital is an essential element of disaster resilience, but today's conditions can transform communities into fearful and risky societies, negatively impacting social capital and reducing disaster resilience. Interdisciplinary studies are necessary to better understand and examine social capital and fear of crime as social components of disaster resilience. This cross-sectional research design investigates the mediating role of fear of crime in the impact of social capital on individual disaster resilience. This study employs face-to-face surveys conducted between June and September 2021 with 1040 participants residing in the Burdur and Antalya provinces of Türkiye. The data were analyzed using a structural equation model. Given the findings, it was determined that social capital increases individuals' disaster resilience and decreases their fear of crime. However, individuals' fear of crime negatively affects their disaster resilience and partially mediates the effect of social capital on individual disaster resilience. Individuals with high social capital are more resilient to disasters, whereas fear of crime reduces this resilience. Therefore, this study emphasizes that policies that strengthen social capital and reduce fear of crime are essential in increasing disaster resilience and offer recommendations.

Keywords: Social Capital, Fear of Crime, Disaster Resilience,

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1. INTRODUCTION

In 2023, 399 disasters caused by natural hazards occurred worldwide, causing 86,473 deaths, affecting 93.1 million people, and economic damages reaching \$202.7 billion. The occurrence, number of deaths, and financial losses in 2023 exceeded the twenty-year average by disaster type. The major earthquakes that hit Türkiye and Syria were impactful here. Due to the earthquakes on February 6, 2023, 50,783 people died in Türkiye alone, and a total economic loss of 34 billion US dollars in damage occurred (Centre for Research on the Epidemiology of Disasters [CRED], 2024). More than 1,300 earthquakes occurred only in Türkiye in 2023; floods in the Western Black Sea region, major fires in Antalya and Muğla, and landslides in various areas had severe social and economic impacts. In addition, approximately 70% of the surface area of Türkiye is at risk of first and second-degree earthquakes, placing the country at high risk of disaster (Disaster and Emergency Management Authority [AFAD], 2024). These data reveal that disasters are multidimensional phenomena that need to be combated both physically and socially. On the other hand, CRED data only covers natural and technological disasters and do not include human-induced crises such as war, conflict, migration, and epidemics. Therefore, the real burden of disasters on society is far beyond the statistics presented.

Many catastrophic events that occurred worldwide during the past two decades caused significant damage to the sustainable development of societies, prompting global interest and emphasis on creating disaster-resilient societies, cities, and people (United Nations Office for Disaster Risk Reduction [UNDRR], 2015b, 2015a). These concerns are further exacerbated by contemporary global challenges that deepen vulnerabilities and threaten collective resilience. The world faces various challenges, such as the COVID-19 pandemic, migration crises, wars in Ukraine and the Middle East, global financial crises, hunger, and drought, all of which have profoundly impacted people. More than 775 million cases of COVID-19 were confirmed, resulting in severe economic and social consequences. It also led to the first-ever decline in the global Human Development Index (HDI) and increased perceived insecurity even in countries with high HDI scores (World Health Organization [WHO], 2024). On the other hand, the World Migration Report highlights that international migration has risen due to war, economic and political instability, and climate change (International Organization for Migration [IOM], 2024). In 2022, Russia's invasion of Ukraine resulted in tens of thousands of civilian casualties, displacement of millions of people, and the destruction of infrastructure, triggering one of the fastestgrowing refugee crises since the Second World War. These challenges have resulted in a global humanitarian crisis requiring immediate attention (World Bank, 2022).

Türkiye stands out with its low level of social capital. Given the seventh wave of the World Values Survey (WVS) (2017-2022), the general level of trust among individuals in Türkiye is still low. Only 12.4% of the survey participants responded that "most people can be trusted," whereas 86.3% said that "One should be very careful in relationships" (World Values Survey [WVS], 2023). These rates indicate that Türkiye has limited social capital and that a widespread environment of insecurity prevails

in social relations. Rapid and unregulated urbanization, socioeconomic inequalities, high migration rates, and perceived crime, especially in metropolitan cities. For example, Türkiye has become the 18th most populous country out of 194 countries worldwide. Accordingly, the rate of people living in provincial and district centers in Türkiye has increased to 93% in 2023, while the rate of people living in towns and villages has decreased to 7% (Turkish Statistical Institute, 2024). According to the most up-to-date data from the Directorate of Migration Management, approximately 2.8 million Syrians are temporarily protected in Türkiye (Republic of Türkiye Ministry of Interior, 2025). This mass mobility created a heterogeneous population, particularly in metropolitan cities, increasing the risks such as social differences, security problems, and social exclusion (Karakus, 2013; Kul, 2009; Öztürk, 2016). Association membership rate is only 14% among the general population in Türkiye, indicating that civic participation remains limited (Republic of Türkiye Ministry of Interior, 2024). Karagül (2012) reported that economic and political insecurities increase crime rates, undermine social trust, and weaken social capital. On the other hand, as social structures become more heterogeneous, norms of association and reciprocity weaken, and social solidarity and trust decline accordingly (Field, 2016). In these respects, the Turkish example provides an important context that can contribute to disaster resilience discussions shaped around social capital, trust, and fear of crime locally and globally.

It is projected that 68% of people on Earth will reside in cities by 2050. The risk of disasters causing severe damage also increases with the increasingly urbanizing world. The challenges growing cities face (population growth, migration, inadequate infrastructure, and substandard buildings) disproportionately affect poorer countries, leading to a higher level of loss of life and property in disasters. Moreover, cities with low social capital are particularly vulnerable to catastrophe. Urban areas will only become riskier without addressing these vulnerabilities. The United Nations (UN) HABITAT III New Urban Agenda predicts that the urban population will double by 2050, bringing economic, social, and cultural density. However, the UN warns that this growth also presents significant sustainability challenges, including housing, infrastructure, and security (United Nations [UN], 2017). It is well-known that a significant portion of the urban population residing in developing countries has been victimized by various criminal activities at least once within the last five years. The rapid urbanization in these regions has led to an alarming rise in the crime rate. Moreover, women and children often face barriers to accessing essential urban services, which creates further exclusion and vulnerability. Unfortunately, the limited success of poverty reduction policies may hinder progress in addressing this issue, potentially leaving the problem unresolved (UN-Habitat, 2022, 2024). As a result, in today's disaster century, factors such as the growing effects of disasters, urbanization, poverty, safety, and globalization negatively affect the sustainable development of societies. However, building disasterresilient societies is the best strategy to protect a community's future. Therefore, there is an increasing global interest in improving resilience to disasters with a proactive approach.

Disaster resilience is shaped by a combination of social, economic, and environmental factors, with social capital playing a critical role among these factors. Within this comprehensive approach, the relationship between social capital and fear of crime is decisive in strengthening disaster resilience. In societies with high social capital, individuals' fear of crime decreases, positively affecting disaster resilience. Since a high fear of crime limits individuals' social interactions and information sharing, it weakens the social support mechanisms needed in disaster resilience (Bolger & Bolger, 2019; Han, 2021; Sargeant et al., 2017). High fear of crime limits individuals' participation in social activities, weakens social ties, and reduces the collective action capacity required during disasters (Farmer et al., 2018; Weil, 2020). In addition, high fear of crime delays the reintegration of individuals into society in the post-disaster period, increases social isolation and withdrawal behaviors, and consequently slows down society's post-disaster recovery process (Hino et al., 2018). Therefore, policies strengthening social capital and reducing fear of crime play a critical role in increasing community resilience to disasters (Monteil et al., 2020; Pfefferbaum et al., 2017).

This study aims to examine the mediating role of fear of crime in social capital's effects on individual disaster resilience. Many studies have examined the effects of social capital on disaster resilience, but the mediating role of fear of crime has yet to be analyzed. This study addresses this gap in the literature and is essential in creating disaster management strategies by considering disaster resilience more broadly. In this context, the following research questions were established:

- Does individuals' social capital enhance their disaster resilience?
- Does individuals' social capital reduce their fear of crime?
- Does fear of crime decrease individuals' disaster resilience?
- Does fear of crime mediate the effect of social capital on disaster resilience?

2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

2.1. Social Capital and Disaster Resilience

Disaster resilience refers to society's ability to cope with disasters, recover from minor damage, and quickly return to routine life (Lucini, 2014). Disaster-resistant societies can withstand disasters with minimal effects and quickly recover (Mayunga, 2007). Social capital plays an important role in recovering quickly after disasters and becoming more resilient (Kim et al., 2017; Lucini, 2014).

Pierre Bourdieu (Bourdieu, 1986), the first contemporary theorist of social capital, defines social capital as "the collection of actual or potential resources linked to having a durable network of more or less institutionalized relationships of mutual acquaintance or recognition." Coleman, another social capital theorist, believes that social capital relies on the structure of actors and the relationships between them. Therefore, social capital is a tool individuals or communities use to achieve specific goals, and it explains how people work together. Moreover, social capital is not something an individual can have

independently; rather, it originates from individual relationships and is determined by reciprocity and trust (Coleman, 1988). Putnam, the theorist who introduced the most well-known and widely used definition of social capital, defines it as "the characteristics of social organization, such as networks, norms, and social trust, that facilitate coordination and cooperation for mutual benefit" (Putnam, 1995). Francis Fukuyama, another social capital theorist, defines social capital as embodied and informal norms that create cooperation. At the same time, he emphasizes that social capital can be gained when individuals take collective actions by adopting standard norms based on a sense of trust. As stated by him, social capital is a capacity arising from the prevailing trust in a society or community (Fukuyama, 2000).

Societies with solid social capital have diverse social networks and civil associations. They are in a stronger position to fight poverty, reduce vulnerability, resolve conflicts, and benefit from new opportunities. Aldrich (2011) emphasizes that social capital is the most important and solid element of the recovery of societies after disasters. Accordingly, social capital can prevent individuals or communities from being marginalized, encourage preparedness and risk awareness, and facilitate access to various resources such as information, social support, and financial assistance. Therefore, it can also reduce societies' vulnerability to disasters (Aldrich, 2011). Particularly before, during, and after disasters, trust, a fundamental component of social capital, is necessary for coordination, collaboration, and communication. As a result, it influences individual and group behavior and promotes the involvement of many stakeholders in decision-making (Monteil et al., 2020). However, some studies show that strong social networks are not always inclusive in disaster response and recovery processes. In particular, groups with high levels of social capital can exclude other groups from relief processes, which can increase social inequalities in disaster resilience (Aldrich & Crook, 2008). This finding suggests that the effects of social capital may vary depending on the context.

Regarding disaster management, different forms of social capital play essential roles in increasing disaster resilience. Accordingly, bonding social capital constitutes the assistance provided by the closest individuals to each other after disasters. Strong bonding social capital enhances recovery efforts and reduces dependency on external support. Bridging social capital is the support disaster survivors receive from local social services and health, religious, commercial, and other service provider groups. Here, bridging social capital affects the post-disaster period by organizing volunteers, raising awareness, preparing the community for future disasters, and providing them with access to resources. Therefore, high levels of bridging social capital increase disaster resilience by improving disaster preparedness and access to information and resources during recovery. Bonding social capital is particularly valuable because it gives individuals access to authorities and institutions. Accordingly, bonding social capital positively affects the community's recovery due to the connection between the people in the government or other positions of power in the community (Hsueh, 2019; Kim et al., 2017; Monteil et al., 2020; Pfefferbaum et al., 2017). Therefore, bonding social capital plays a vital role in the

short-term post-disaster recovery period, whereas bridging and unifying social capitals play an important role in the long-term recovery period, increasing disaster resilience. However, some studies indicate that social ties may weaken, and the effect of social capital on recovery may be limited, particularly in regions with severe disasters (Xiong & Li, 2024). Such findings suggest that the impact of social capital on disaster resilience is not linear but contextual.

Other elements that explain the relationship between social capital and disaster resilience are collective effectiveness and active participation. Social capital enables citizens to solve their common problems more efficiently. Since groups have a more significant impact than individuals working alone, and their performance increases, a framework that encourages community participation can effectively increase community resilience (Pfefferbaum et al., 2017). In disaster situations, many families, groups, and organizations instinctively communicate, cooperate, and help others in the community. Especially after a disaster, victims first turn to their close circle, such as their family and friends, for emergency support. Afterward, they are frequently inspired to collaborate to rebuild their communities. Therefore, societies with substantial social capital can return to their everyday life sooner by encouraging active participation and collective actions during the post-disaster recovery period (Kim et al., 2017).

The most resilient communities are those with high social capital that work together towards a common goal (Mayunga, 2007; Pfefferbaum et al., 2017). In short, social capital promotes adaptive capacities in societies, aiding their coordination in disaster contexts. For this reason, social capital and networks are becoming more important in enhancing disaster resilience (Karunarathne & Lee, 2019). Therefore, the weakness of social capital is a factor that increases society's vulnerability. Previous studies also support this discourse. Kirschenbaum (2004) states that social networks, an important part of social capital, can share knowledge on survival strategies, offer the tools to deal with emergencies, and significantly improve catastrophe behaviors, instilling a sense of reassurance and optimism. Therefore, it states that the disaster behaviors of individuals in societies with strong ties and social networks are also positively affected. In his study, Yamamura (2010) investigates how disaster damage is influenced by social capital. The study provides two significant findings. First, social capital can minimize the harm that disasters wreak. Second, social capital is more effective in preventing disasters because it encourages people to cooperate. In their study examining the effects of social capital after Hurricane Katrina, Hawkins and Maurer (2010) report that many participants benefited from social capital. People first received help from their close networks and then assisted others. It also played a psychological role in developing resilience. Social capital has also been adequate for preparation and providing mutual aid during the early warning period before the hurricane.

Studies show that social capital positively affects disaster resilience. Thus, individuals with high social capital are more prepared for disasters, and as social capital increases, society's disaster resilience also grows (Aldrich & Meyer, 2015; Cutter et al., 2016; Hsueh, 2019; Kim et al., 2017; Kirschenbaum, 2004; Mayunga, 2007; Monteil et al., 2020). Social capital enhances resilience by fostering mutual trust

and cooperation, which are vital during disasters (Kim et al., 2017; Lucini, 2014; Mayunga, 2007). Sharing information and fostering social solidarity through social capital expedite disaster preparedness and recovery phases. Based on these dynamics, social capital is expected to increase disaster resilience. Consequently, it is hypothesized that **H1(a): Social capital positively affects individual disaster resilience**, as individuals with greater social capital are more likely to benefit from the collective support and resources necessary for effective disaster management.

2.2. Social Capital and Fear of Crime

The emotion of fear is a fundamental aspect of human nature that is influenced by various factors. Crime and related symbols are one such factors that can trigger this emotion. Since ancient times, individuals have been worried about exposure to criminal activities. However, nowadays, the fear of crime is a social issue due to technological advancements, poverty, increased migration, changing societal values, urbanization, and declining trust (Öztürk, 2016). Ulrich Beck, a prominent sociologist, characterizes modern society as a "risk society" where dangers and uncertainties rise due to rapid modernization. He highlights that the typical slogan of such societies is "I am afraid" and that anxiety is rampant in these communities (Beck, 2009).

Even though there are various definitions of fear of crime in the literature, many studies rely on Ferraro's (1995) concept. Ferraro (1995) describes the fear of crime as "an emotional anxiety or fear response that individuals develop towards crime or symbols associated with crime" (p.23). Additionally, Ferraro notes that fear of crime is both an emotional and a physiological response to impending danger (Ferraro, 1995). The fear of crime can be considered a state of concern about victimization or a perception of the risk of victimization. One's perceived risk of victimization is important in fear of crime since it affects the degree of fear an individual experience. In other words, the probability of being victimized (perceived risk) influences the level of fear one has of crime. Thus, perceived risk is the likelihood of victimization, and fear of crime is an emotional reaction to the possibility of victimization (Rader, 2017; Rader et al., 2012).

Fear of crime is an emotional response that people develop due to different types of victimization. There are several theories aiming to explain the fear of crime and reduce it by taking precautions. These theories consider direct and indirect victimization, risk perception, environmental factors, and restrictive behaviors. It is essential to address all these aspects to better understand the fear of crime (Ferraro, 1995, 1996). The vulnerability model is one of the theories related to an individual's fear of crime. As emphasized in this theory, people who perceive themselves as physically or socially disadvantaged are more vulnerable to potential victimization, and they believe that they cannot afford the damages if they become victims of crime. This theory suggests that people who lack social and physical tools to protect themselves from crime and cope with it are more likely to experience fear of crime. The theory highlights individual demographic characteristics such as age, ethnicity, gender, and

economic status that can explain the fear of crime (Ferraro, 1996; Kul, 2009; Rader, 2017). The second one is the victimization model, which associates victimization and fear and argues that the individual's direct and indirect victimization experiences have an impact on the fear of crime. Accordingly, individuals who are directly or indirectly exposed to crime experience fear, anxiety, and insecurity about future exposure to crime. These individuals experience effects such as being unable to go out alone, changing the neighborhood or even the city they live in, approaching everyone with suspicion, and focusing on crime news in the media (McGarrell et al., 1997; Rader, 2017).

The disorder model, the third theory explaining the fear of crime, is also considered an ecological approach because it associates the fear of crime with environmental factors rather than individuality. This theory, put forward by Chicago school theorists, is based on the relationship between the city's structure and crime. Accordingly, factors such as the heterogeneous structure of the city, poverty, rapid population mobility, and the loss of functionality of the family institution lead to social disintegration, weakening of traditional and social control mechanisms, negative impact on social capital, formation of crime-prone subcultures, and environmental irregularities. When an environment is aesthetically pleasing, it causes people to perceive that there is no crime and that it is a safe area. However, physical irregularities, such as garbage on the streets, abandoned buildings, junk cars, inadequate street lighting, and collapsed walls, and social irregularities, such as the presence of street gangs, drunk people, strangers, and drug use on the streets indicate that local social control and traditional norms are weakening. Therefore, environmental and social irregularities increase the fear of crime in society (Bolger & Bolger, 2019; Lagrange et al., 1992; McGarrell et al., 1997; Öztürk, 2016).

Finally, the community concern model, closely related to dysregulation theory, is also known as the social interest perspective, a social control model. Unlike the dysregulation approach, this theory addresses the anxiety states of those living in a particular environment. Accordingly, he argues that the existence of harmony, trust, and peace at the local level is very effective in reducing the fear of crime. In addition, factors such as dissociations, disharmony in society, weakening of social networks, and social exclusion increase anxiety levels and fear of crime in societies. Therefore, in the community concern model, concepts such as interpersonal trust, social control, social capital, and social harmony are the focus (McGarrell et al., 1997; Öztürk, 2016). The social change experienced, particularly in heterogeneous societies, the weakening of interpersonal relationships and mutual trust, and social separations negatively affect individuals, such as introversion, withdrawal, and fear of strangers, ultimately resulting in a decrease in social capital. Therefore, in such societies, formal and informal social control mechanisms, some of the most important preventive factors of crime, are disrupted. As social control decreases, it becomes easier for criminals to engage in criminal activities. At the same time, individuals fear being left without environmental support when experiencing a crime (Ferraro, 1995; Kul, 2009).

As reported in many studies, social capital directly affects fear of crime. Accordingly, the fear of crime decreases with increasing social capital (Han, 2021; Hernández et al., 2020; Matsukawa & Tatsuki, 2018; Öztürk, 2016; Sargeant et al., 2017). However, some studies indicate that social capitalbased security approaches are effective in reducing only certain types of crimes (e.g., street crime) and they have limited effects on other kinds of crimes, such as property crimes (Matsukawa & Tatsuki, 2018). In addition, the sense of security provided by social capital may not always be sustainable (Hernández et al., 2020). These findings also suggest that the relationship between social capital and fear of crime may be contextual and limited. In societies with substantial social capital, social control mechanisms work more effectively, social trust increases, and individuals' perceptions of threats to their environment decreases (Han, 2021; Sargeant et al., 2017). This reduces individuals' fear of crime and supports their participation in social life. In this context, social capital is predicted to reduce the fear of crime. Therefore, the following hypothesis is proposed: H1(b), which states that social capital negatively affects fear of crime, as individuals with higher social capital generally experience lower fear of crime.

2.3. Disaster Resilience and Fear of Crime

Studies on the relationship between disasters and fear of crime focus primarily on the fear of crime experienced during and after the disaster. These studies generally report that disaster areas with a high capacity for social control mechanisms have less fear of crime and recover more quickly. Accordingly, despite the destruction caused by disasters, if the social organization structure of the society is solid, the return of that society to everyday life is faster (Farmer et al., 2018; Hino et al., 2018; Tierney, 2011). The increasing need for security elevates people's fear of crime, especially after disasters, increases in crime rates, or crime news. For example, during and after Hurricane Katrina, news outlets frequently reported crime and acts of violence. Moreover, reports immediately following the hurricane included more examples of violence, panic, looting, and severe disorder. This situation has increased people's fear of crime and perceived victimization (Farmer et al., 2018).

Some studies examine the existence of crimes that may occur after disasters and the fear of crime experienced by individuals in this context. As reported in a study on the fear of crime experienced by evacuees after the Great Japan Earthquake in 2011, many of those living in evacuation shelters feared theft in their abandoned homes. At the same time, women in evacuation shelters experience more fear of crime, especially sexual crimes (Hino et al., 2018). In a study conducted after Hurricane Katrina, individuals living in New Orleans experienced a higher level of fear of crime as crime rates grew. Increased fear of crime created a sense of insecurity among people, decreasing social solidarity and the willingness of neighbors to help each other. People who left their homes were hesitant to return due to increased fear of crime. Therefore, it weakened disaster resilience by making it difficult for individuals to recover and rebuild after the hurricane (Weil, 2020). In another study, many participants stated that they did not initially choose to use shelters during Hurricane Katrina mainly because they were more

concerned about security than about the cleanliness and durability of shelters. People fear crime due to the unsafe conditions of the shelters. Women, especially, stated their fear of being victimized by sexual crimes in shelters (Farmer et al., 2018). Finally, in a study on Hurricane Katrina evacuees, 22% reported being threatened with violence in shelters. This situation prevented effective hurricane evacuation and shelter access (Brodie et al., 2006).

As can be seen, increased crime rates and fear of crime after a disaster can delay the return to everyday life, causing isolation and withdrawal from society and hindering access to information and social networks. For this reason, it is important to encourage community development informed by knowledge and participation to increase the disaster resilience of societies (Lucini, 2014) because disaster resilience depends on accessing, processing, understanding, and mobilizing information (DiTirro, 2018). However, it was stated that this relationship does not work in the same way in every disaster context. In some disasters, rapid provision of security measures or high social solidarity can prevent the spread of fear of crime. The social context and institutional interventions shape the fear of crime after a disaster. Fear of crime negatively impacts post-disaster recovery processes by reducing individuals' social interactions, restricting access to information, and weakening social support mechanisms (Farmer et al., 2018; Weil, 2020). The weakening of ties to society reduces disaster resilience. Therefore, fear of crime is expected to negatively impact individual disaster resilience. Hence, the following hypothesis is proposed: **H1(c): Fear of crime negatively affects individual disaster resilience**, as higher levels of fear can erode social cohesion and obstruct recovery efforts by diminishing community engagement and access to essential resources.

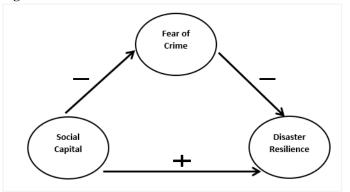
2.4. Mediation Effect of Fear of Crime

The literature review revealed that social capital positively affects disaster resilience (Cutter et al., 2016; Hsueh, 2019; Kim et al., 2017; Monteil et al., 2020). However, fear of crime negatively affects the quality of life in every way by causing distrust, anxiety, asociality, alienation, and psychological disorders in people. It weakens interpersonal relationships, damages social trust, and thus weakens social capital (Han, 2021; Hernández et al., 2020; Matsukawa & Tatsuki, 2018). People with lower levels of fear of crime are more likely to make good use of their social capital during the recovery phase of a disaster by joining groups and reaching out to support systems. On the other hand, studies have shown that fear of crime negatively affects disaster resilience (Farmer et al., 2018; Hino et al., 2018; Weil, 2020).

Considering the effects stated in the literature review, while social capital reduces fear of crime, fear of crime also affects individual disaster resilience negatively. In this context, fear of crime is expected to mediate the effect of social capital on individual disaster resilience. Thus, the effect of social capital on disaster resilience may be partially mediated through its influence on reducing fear of crime. The literature frequently examines direct relationships between social capital and disaster resilience or

fear of crime. Still, the mediating role of fear of crime has not been empirically tested. This study is one of the first models to address this deficiency and evaluate the triple relationship holistically; it offers an original contribution to the literature. Based on this understanding, the following hypothesis is proposed: **H1(d) – Fear of crime mediates the effect of social capital on individual disaster resilience**.

Figure 1. Research Model



Based on the hypotheses, the model is structured and shown in Figure 1.

- H1(a): Social capital (SC) \rightarrow Individual disaster resilience (IDR)
- H1(b): Social capital (SC) \rightarrow Fear of crime (FC)
- H1(c): Fear of crime (FC) \rightarrow Individual disaster resilience (IDR)
- H1(d): Social capital (SC) → Fear of crime (FC) → Individual disaster resilience (IDR) (mediating effect)

3. MATERIALS AND METHODS

3.1. Instruments and Data Collection

After obtaining ethics committee approval and all participants' informed consent, Data were collected between June and September 2021. The study population consists of people aged older than 18 years who live in Burdur and central Antalya, two nearby cities south of Türkiye. A random sampling method was used. When calculating the number of samples, a margin of error of 5% at a confidence level of 95% was used. Researchers collected data through a face-to-face survey. Surveys were conducted in open areas where the public is densely populated, such as parks, main streets, and public institutions in the central districts of Burdur and Antalya. Participants were randomly selected and invited to participate in these areas voluntarily. Throughout the data collection process, mask use and social distancing rules were meticulously followed as part of the measures against the COVID-19 pandemic.

The survey form was prepared utilizing the most widely preferred scales in the literature regarding the variables (social capital, fear of crime, and individual disaster resilience), with these scales having been tested for validity and reliability. The scales used in this study are tools validated in the literature, align with the study's theoretical model through their multidimensional structures, and are

widely used in disaster, security, and social structure research. The scales' conceptual scope and methodological suitability were effective for their intended purpose in the context of this research.

The Social Capital Scale (SC) was developed by Onyx and Bullen (2000) and adapted to Turkish by Ardahan (2012). This scale assesses levels of participation in social networks, norms of mutual trust and cooperation, and frequency of social engagement. Each item is rated on a five-point Likert scale, addressing the intensity of respondents' agreement or disagreement. It consists of 28 items and nine subdimensions, and Cronbach's alpha (α) coefficient is 0.711 (Ardahan, 2012). The subdimension of participation in local committees (PLC) refers to individuals' involvement in formal or informal local governance activities that positively influence community dynamics and social life. Neighborhood Relations (NR) represent the connections individuals maintain with their community members. Sense of Belonging (SB) reflects individuals' feelings of attachment to their workplace, school, or team. Tolerance for diversity (TD) indicates individuals' acceptance and sensitivity towards personal differences from culture, gender identity, lifestyle, or religion. Membership in civil society organizations (MCSO) represents formal non-governmental organization (NGO) involvement and active participation. Trust in people (TP) measures individuals' confidence in others within their social environment, while trust in the environment (TE) assesses the perceived safety of the physical surroundings. Social initiative (SI) reflects individuals' acceptance of others, respect for their opinions, and willingness to take social action when needed. Finally, social representation (SR) captures individuals' assumption of roles and responsibilities within their community, including areas beyond their direct responsibility. The scale was administered using a 5-point Likert format and was designed to assess social capital at the individual level (Ardahan, 2012; Onyx & Bullen, 2000).

Fear of Crime Scale (FC) was originally developed by Ferraro (1995) and adapted to Turkish by Kul (2009). This scale measures the degree of fear individuals experience concerning general crime, as well as specific types of crime. The scale effectively captures the respondents' perceptions and emotional responses to crime, reflecting the multidimensional nature of fear. The Cronbach's alpha coefficient of the 11-item scale was 0.93 (Ferraro, 1995; Kul, 2009).

Individual Disaster Resilience Scale (IDR) was developed by DiTirro (2018) and adapted to Turkish by Şen (2022). This scale measures individuals' resilience to disasters. The multidimensional approach of this scale allows for a comprehensive assessment of disaster resilience at the individual level. The Cronbach's alpha (α) of the IDR scale with four sub-dimensions and 19 items is 0.896. The Knowledge Coping (KC) dimension focuses on the knowledge that the individual has as a result of their individual or educational experiences in the pre-disaster period. Accordingly, it is valuable for an individual to cope with disasters with the knowledge he has acquired. The Informational Coping (IC) dimension measures the individual's ability to obtain up-to-date information about disasters, evaluate the information received, and take action. The Communal Coping (CC) dimension focuses on the social support an individual can access and use during a disaster. Finally, the Affective Coping (AC) dimension

relates to how well individuals can manage their emotional states during disasters (DiTirro, 2018; Şen, 2022). In the AMOS model, the subdimensions of the scales were represented using specific abbreviations for ease of analysis.

Data were gathered through face-to-face surveys between June and September 2021. Before data collection, ethical approval was obtained from the relevant ethics committee, and all participants provided informed consent. The research population consists of people over eighteen who live in Burdur and central Antalya, two nearby cities south of Türkiye. The sampling method used was random sampling. When calculating the number of samples, a margin of error of 5% at a confidence level of 95% was used.

3.2. Data Analysis

The data obtained from 1040 participants were analyzed using SPSS (Statistical Package for Social Sciences) for Windows, 25.0, and the AMOS (Analysis of Moment Structures) 24.0 program. The validity and reliability of the scales were assessed using Confirmatory Factor Analysis (CFA). The factor loadings of each item on the scales and Cronbach's alpha coefficients were examined to ensure structural reliability. Additionally, composite reliability (CR) and average variance explained (AVE) values were also examined. A CR value higher than 0.70 indicates the structure's reliability, and an AVE value higher than 0.50 indicates sufficient convergent validity (Fornell & Larcker, 1981).

The goodness of fit indices was used to assess the measurement model's overall fit. The following fit standards for the model are acceptable: χ^2 /df (Chi-square/Degrees of Freedom) should be ≤ 5 , GFI (Goodness-of-Fit Index), AGFI (Adjusted Goodness-of-Fit Index), CFI (Comparative Fit Index), IFI (Incremental Fit Index), and TLI (Tucker-Lewis Index) should all be ≥ 0.80 , SRMR (Standardized Root Mean Square Residual) should be ≤ 0.10 , and RMSEA (Root Mean Square Error of Approximation) should be between 0.05 and 0.08 (Dehon et al., 2005; Hooper et al., 2008; Hu & Bentler, 1999; Schermelleh-Engel et al., 2003; Shevlin et al., 2000; Simon et al., 2010).

Following the validation of the measurement model, the proposed hypotheses were statistically tested using structural equation modeling (SEM) and the AMOS 24 software. SEM prevents inaccurate standard error predictions and offers a thorough discovery and analysis of the proposed hypothetical model. The mediation effect was tested using bootstrapping methods. This method yields substantial estimates and confidence ranges for the mediation effect, enabling a thorough analysis of direct and mediated connections within the model. The results of both direct and mediated relationships within the model were reported with standardized path coefficients (β), standard errors (SE), t-values, and p-values. All analyses were conducted with a significance level set at p < 0.05.

4. RESULTS

4.1. Descriptive Statistics

The participants' sociodemographic data are shown in Table 1. Accordingly, 51.2% of the participants were female, and 48.8% were male. The mean age of the participants was 36.06 ± 11.00 . The age distribution revealed that 6.9% were 20 years or younger, 29.4% were aged 21-30 years, 29.6% were aged 31-40 years, 23.2% were aged 41-50 years, and 10.9% were 51 years or older. Participants were almost evenly distributed across two provinces, with 40.8% from Burdur and 59.2% from Antalya. Regarding marital status, 63.1% were married, and 36.9% were single. Educational level varied, with 9.9% with a secondary school graduation or below, 20.5% with a high school graduation, 13.8% with an associate degree, 43.8% with a bachelor's degree, and 12.0% with a postgraduate degree. Employment status revealed that 35.9% worked in the public sector, 26.8% in the private sector, 15.3% were unemployed, and 22.0% were categorized as "other" (e.g., retired or running their own business). Regarding income levels, 42.2% of participants reported high incomes, 16.5% identified as having medium incomes, and 5.9% fell into the low-income group.

| | n | % | |
|-------------------------------------|-------------------------------------|-------|-------|
| Gender | | 533 | 51.2 |
| Gender | Male | 507 | 48.8 |
| | 20 years and younger | 72 | 6.9 |
| 4 55 | 21-30 | 306 | 29.4 |
| Age (<i>X</i> ±SS, 36.06±11.64) | 31-40 | 308 | 29.6 |
| (A±35, 50.00±11.04) | 41-50 | 241 | 23.2 |
| | 51 years and older | 113 | 10.9 |
| Province | Burdur | 424 | 40.8 |
| Province | Antalya | 616 | 59.2 |
| Manital status | Married | 656 | 63.1 |
| Marital status | Single | 384 | 36.9 |
| | Secondary School Graduate and Below | 103 | 9.9 |
| | High-School Graduate | 213 | 20.5 |
| Education level | Associate's Degree | 144 | 13.8 |
| | Bachelor's Degree | 455 | 43.8 |
| | Postgraduate Degree | 125 | 12.0 |
| | Work in the Public Sector | 373 | 35.9 |
| We also a States | Work in the Private sector | 279 | 26.8 |
| Working Status | Unemployed | 159 | 15.3 |
| | Other (Retired, own business) | 229 | 22.0 |
| | Low | 61 | 5.9 |
| | Low-medium | 204 | 19.6 |
| Income Groups | Medium | 172 | 16.5 |
| | High-medium | 164 | 15.8 |
| | High | 439 | 42.2 |
| Provious disaster exposure | Yes | 440 | 42.3 |
| Previous disaster exposure | No | 600 | 57.7 |
| Paggiving disaster training | Yes | 574 | 55.2 |
| Receiving disaster training | No | 466 | 44.8 |
| To | tal | 1,040 | 100.0 |

Table 1. Distribution of Participants by Sociodemographic Characteristics

In addition to sociodemographic information, participants were also asked about their experiences with disasters and their disaster preparedness. While 42.3% of the participants reported having experienced a disaster before, 57.7% had not. Additionally, 55.2% of the participants reported having attended a training or awareness program on disasters.

4.2. Validity and Reliability of Scales

Table 2 provides a comprehensive summary of the internal consistency and construct validity of the scales used in this study.

| Variable | Items | Factor Loadings | CR | AVE | Cronbach Alfa (α) | $\begin{array}{l} \chi 2/df \\ \leq 5 \end{array}$ | GFI ≥0.80 | AGFI ≥0.80 | CFI ≥0.80 | IFI ≥0.80 | TLI ≥0.80 | SRMR ≥0.10 |
|--------------------------|-------|--------------------|-------|-------|----------------------|--|--------------|---------------|--------------|--------------|--------------|---------------|
| | sc1 | 0.848 | | | | | | | | | | |
| | sc2 | 0.878 | | | | | | | | | | |
| | sc3 | 0.863 | | | | | | | | | | |
| | sc4 | 0.853 | | | | | | | | | | |
| | sc5 | 0.844 | | | | | | | | | | |
| | sc6 | 0.619 | | | | | | | | | | |
| | sc7 | 0.661 | | | | | | | | | | |
| | sc8 | 0.849 | | | | | | | | | | |
| | sc9 | 0.765 | | | | | | | | | | |
| | sc10 | 0.761 | | | | | | | | | | |
| | sc11 | 0.605 | | | | | | | | | | |
| | sc12 | 0.714 | | | | | | | | | | |
| | sc13 | 0.753 | | | | | | | | | | |
| Social | sc14 | 0.784 | | | | | | | | | | |
| Capital | sc15 | 0.883 | 0.979 | 0.619 | 0.938 | 4.028 | 0.921 | 0.896 | 0.949 | 0.949 | 0.937 | 0.043 |
| (SC) | sc16 | 0.884 | | | | | | | | | | |
| | sc17 | 0.919 | | | | | | | | | | |
| | sc18 | 0.931 | | | | | | | | | | |
| | sc19 | 0.712 | | | | | | | | | | |
| | sc20 | 0.704 | | | | | | | | | | |
| | sc21 | 0.804 | | | | | | | | | | |
| | sc21 | 0.830 | | | | | | | | | | |
| | sc22 | 0.818 | | | | | | | | | | |
| | sc23 | 0.664 | | | | | | | | | | |
| | sc24 | 0.719 | | | | | | | | | | |
| | sc25 | 0.753 | | | | | | | | | | |
| | sc26 | 0.609 | | | | | | | | | | |
| | sc27 | 0.790 | | | | | | | | | | |
| | sc28 | 0.848 | | | | | | | | | | |
| | fc1 | 0.848 | | | | | | | | | | |
| Fear of Crime (FC) | fc2 | 0.891 | | | | | | | | | | |
| | fc3 | 0.920 | | | | | | | | | | |
| | fc4 | 0.856 | | | | | | | | | | |
| | fc5 | 0.849 | | | | | | | | | | |
| | fc6 | 0.926 | 0.980 | 0.819 | 0.954 | 10.127 | 0.925 | 0.879 | 0.900 | 0.901 | 0.086 | 0.086 |
| | fc7 | 0.919 | | | | | | | | | | |
| | fc8 | 0.940 | | | | | | | | | | |
| | fc9 | 0.984 | | | | | | | | | | |
| | fc10 | 0.971 | | | | | | | | | | |
| | fc11 | 0.837 | | | | | | | | | | |

Table 2. Summary of Scale Validity and Reliability Findings

| Variable | Items | Factor Loadings | CR | AVE | Cronbach Alfa (α) | $\chi^{2/df} \leq 5$ | GFI ≥0.80 | AGFI ≥0.80 | CFI ≥0.80 | IFI ≥0.80 | TLI ≥0.80 | SRMR ≥0.10 |
|------------------------|-------|--------------------|-------|-------|----------------------|----------------------|--------------|---------------|--------------|--------------|--------------|---------------|
| | idr1 | 0.640 | | 0.612 | 0.896 | 11.011 | 0.858 | 0.812 | 0.898 | | | |
| | idr2 | 0.617 | | | | | | | | | | |
| | idr3 | 0.810 | | | | | | | | | | |
| | idr4 | 0.759 | | | | | | | | | | |
| | idr5 | 0.697 | | | | | | | | | | |
| | idr6 | 0.822 | | | | | | | | 0.898 | 0.879 | |
| | idr7 | 0.858 | 0.967 | | | | | | | | | |
| | idr8 | 0.902 | | | | | | | | | | 0.076 |
| Individual | idr9 | 0.913 | | | | | | | | | | |
| Disaster Resilience | idr10 | 0.778 | | | | | | | | | | |
| (IDR) | idr11 | 0.813 | | | | | | | | | | |
| () | idr12 | 0.918 | | | | | | | | | | |
| | idr13 | 0.891 | | | | | | | | | | |
| | idr14 | 0.750 | | | | | | | | | | |
| | idr15 | 0.822 | | | | | | | | | | |
| | idr16 | 0.784 | | | | | | | | | | |
| | idr17 | 0.515 | | | | | | | | | | |
| | idr18 | 0.617 | | | | | | | | | | |
| | idr19 | 0.810 | | | | | | | | | | |

(Table 2 cont.)

For the SC scale, the factor loadings range between 0.605 and 0.931, the AVE was 0.619, and the CR was 0.979. The Cronbach's alpha value was 0.937, and the model fit indices (GFI=0.921, CFI=0.949, TLI=0.937, SRMR=0.043) were within acceptable ranges. For FC scale, the factor loadings were in the range of 0.837-0.984, AVE was 0.819, and CR was 0.980. The scale's Cronbach's alpha value was 0.954, and the model fit indices (GFI=0.925, CFI=0.900, TLI=0.866, SRMR=0.086) were within acceptable ranges. Finally, for IDR the factor loadings were in the range of 0.515-0.918, AVE was 0.612, and CR was 0.967. The Cronbach's alpha value was 0.896. The fit indices (GFI=0.858, CFI=0.898, TLI=0.879, SRMR=0.076) were within acceptable limits.

As a result, Cronbach alpha values and CR values of all scales used in the model are greater than 0.70, and factor loadings and AVE values are higher than 0.50. The goodness-of-fit indices were within acceptable limits, suggesting a good fit for the model. Only the chi-square test was above the expected value, because it is sensitive to sample size. For a sample size of 200 or higher, the χ^2 value can be high (Schumacker & Lomax, 2010), therefore, the χ^2/df value may be higher than 5. Overall, the results show high reliability and validity of the posited measurement model.

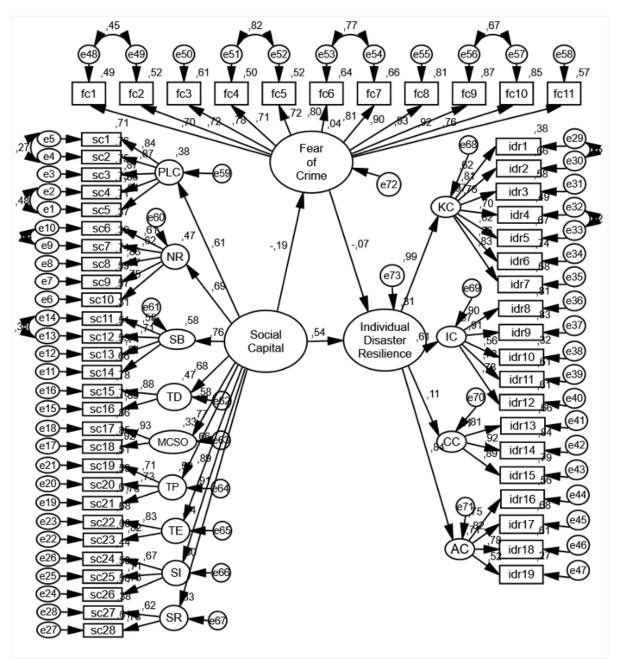
4.3. Mediating effect analysis

A latent variable path analysis was conducted to examine the mediating role of fear of crime between social capital and individual disaster resilience. Figure 2 illustrates the path diagram, Table 3 shows the mediation analysis and model fit indices, and Table 4 summarizes the hypothesis testing results. The model fit indices indicate that the model demonstrates an adequate fit, as the values fall within the recommended thresholds.

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As shown in Figure 2 and supported by the hypothesis testing results in Table 4, social capital has a significant positive effect on individual disaster resilience ($\beta = 0.54$, p < 0.05), supporting H1a. Additionally, social capital significantly negatively affects fear of crime ($\beta = -0.19$, p < 0.05), supporting H1b. Moreover, fear of crime negatively impacts individual disaster resilience ($\beta = -0.07$, p < 0.05), supporting H1c. According to the structural model analysis, social capital's positive effect on individual disaster resilience and the negative effect on fear of crime was significant. In addition, the negative effect of fear of crime on disaster resilience was confirmed. These findings show that social capital affects disaster resilience directly and indirectly and supports this study's theoretical framework.

Figure 2. Path Analysis of Fear of Crime's Mediating Role in the Effect of Social Capital on Individual Disaster Resilience



Regarding mediation, Table 3 indicates that the direct effect of social capital on individual disaster resilience is significant, and an indirect effect analysis was conducted as part of the mediation test. The 95% confidence interval does not include zero (0.002, 0.029), confirming the presence of a mediating effect, thus supporting H1d. Further analysis shows that the direct effect remains significant but with a reduced effect size ($\beta = 0.54$, p < 0.05), indicating partial mediation. Therefore, fear of crime partially mediates the effect of social capital on individual disaster resilience, underscoring the complex pathways through which social capital enhances resilience by reducing fear of crime.

| Effects | β | SE | t | р | Decision | | |
|---|------|-------|---------|--------|------------|--|--|
| Social Capital \rightarrow Individual Disaster Resilience | 0.55 | 0.050 | 12.236 | *** | Accepted | | |
| Direct Effect | β | SE | t | р | Decision | | |
| Social Capital \rightarrow Fear of Crime \rightarrow Individual Disaster Resilience | 0.54 | 0.052 | 11.697 | *** | Accepted | | |
| Indirect Effect | | β | 95% | o CI | Decision | | |
| Social Capital \rightarrow Fear of Crime \rightarrow Individual Disaster Resilience | 0. | 014 | (0.002, | 0.029) | Meaningful | | |
| Goodness-of-fit values: χ2/df: 5.337; RMSEA: 0.065; CFI: 0.860; IFI: 0.861; TLI: 0.853; SRMR: 0.086 | | | | | | | |

Table 3. Mediation Model of Fear of Crime in the Effect of Social Capital on Individual Disaster Resilience

***p<0,05

As a result, all hypotheses created within the scope of the research model were accepted (Table 4).

| Table 4. Summary of Hypothesis Testing Results |
|--|
|--|

| Hypothesis | Result |
|---|----------|
| H1(a): (SC) \rightarrow (IDR) | Accepted |
| H1(b): (SC) \rightarrow (FC) | Accepted |
| $H1(c): (FC) \rightarrow (IDR)$ | Accepted |
| H1(d): (SC) \rightarrow (FC) \rightarrow (IDR) (Mediating effect) | Accepted |

The most striking finding obtained in this study is that fear of crime plays a partial mediating role in the effect of social capital on individual disaster resilience. According to this finding, social capital can indirectly increase disaster resilience by reducing individuals' fear of crime. Therefore, disaster resilience is based on physical and social resources and individuals' psychological security. This result reflects the original contribution of the study to the literature.

5. DISCUSSION

This study examined how fear of crime mediates the effect of social capital on disaster resilience. All the scales used in the study were highly reliable and structurally valid. Given the results achieved, all hypotheses were accepted.

Social capital is one of the fundamental elements of disaster resilience. Accordingly, societies and individuals with high social capital are more resilient to disasters because of their excellent social networks, trust, and community participation (Kim et al., 2017; Lucini, 2014; Mayunga, 2007; Pfefferbaum et al., 2017). As stated in a study examining disaster resilience in America, social capital in rural areas has been the essential driving force of disaster resilience. The more robust social networks and environment of trust in rural areas in comparison to urban areas increased disaster resilience. A study that reported similar results found that communities in rural areas were more resilient to disasters due to their strong social networks. In contrast, those living in urban areas are more vulnerable due to their isolation from various social networks (Straub et al., 2020). In their study, Nakamura and Kanemasu (2020) attribute the high disaster resilience of the Fijian people, who are exposed to cyclones yearly, to the knowledge they have gained from their past experiences and the long-standing tradition of mutual aid within the society. Therefore, individuals with solid networks and relationships perform better at every stage of the disaster cycle, from planning to reconstruction.

As in this study, many studies reported that people with high social capital are better prepared for disasters. Therefore, disaster resilience increases as social capital strengthens. Dokhi et al. (2017) showed that social capital positively affects disaster preparedness knowledge. Accordingly, people with high levels of trust, tolerance, social networking, and participation in collective action are inclined to have better awareness of disaster preparedness. Li and Tan (2019) found that the pre-disaster social networks of the villagers had a significant effect on post-earthquake community participation. Therefore, they suggest that local government should pay close attention to constructing and integrating social networks in earthquake-affected areas to improve community social capital. Similarly, Xiong and Li (2024) stated that social capital positively affects disaster resilience. Still, this significant effect decreases in regions severely affected by disasters and suffering considerable damage. This phenomenon, known as the "retreat effect," happens when people or communities that had previously reacted to a hazard with resilience and solidarity become less eager to participate in preparedness efforts. Therefore, the study indicated that the impact of social capital on disaster resilience is highly complex, and its psychological basis should be addressed when developing it. Although the results achieved reveal that social capital plays a vital role in disaster resilience, it should be noted that its effect is not always linear and can vary depending on specific contexts. The "retreat effect," particularly emphasized in the literature, shows that a decrease in individuals' solidarity and preparedness efforts after a disaster can weaken resilience gains from social capital. Similarly, the exclusionary nature of social capital implies that marginalized groups without strong local networks may exhibit lower resilience to disasters. Therefore, for social capital's positive impact on disaster resilience to be sustainable and inclusive, it is critical to increase the social inclusion of marginalized groups in these networks.

Another aspect demonstrating the complexity of social capital in disaster resilience is that it may have an exclusionary effect. Aldrich and Crook (2008), in their examination of New Orleans' post-

Katrina recovery efforts, reported that local solid networks only helped certain societal groups. Accordingly, while social networks provide rapid and effective recovery for a sizable portion of the populace, they have tended to exclude outsiders. Again, Aldrich (2011) stated that following the 2004 tsunami in the Indian Ocean, villages with high social capital recovered more quickly. However, minorities and outsiders in these villages were excluded from the aid process. In another study, the positive effects of high social capital were observed in rescue efforts immediately after the Nepal earthquake. Nevertheless, this situation changed with the arrival of foreign aid. During the recovery period, marginalized groups with low social capital had access to fewer aid materials and funding support (Panday et al., 2021). While the disaster resilience of groups with high social capital is positively affected, the disaster resilience of marginal groups with weak social capital may decline. Plans and strategies to improve disaster resilience should address this situation.

Aside from its effects on disaster resilience, social capital is essential in addressing social problems such as fear of crime. Accordingly, individuals feel safer, and the fear of crime decreases in societies where social cohesion, trust, social control, and social networks are strong (Bolger & Bolger, 2019; Han, 2021; Öztürk, 2016). The literature indicates that social capital has a negative impact on this fear, similar to the results achieved. A study in Kyoto investigated the effects of social capital and community-based crime prevention activities on fear of crime. Accordingly, social capital, which increased community participation, effectively reduced street crimes and fear of crime. However, it did not significantly affect property crimes such as theft (Matsukawa & Tatsuki, 2018). Similarly, Sargeant et al. (2017) examined the relationship between social capital and fear of crime in Brisbane. They reported that fear of crime was lower in neighborhoods where solidarity, mutual aid, and social trust between neighbors were high. In contrast, another study carried out in Peru on the relationship between fear of crime, social capital, different types of crime, and social inequalities indicated that security measures based on social capital had a negative relationship with fear of crime. However, the study emphasized that security measures based on social capital did not wholly reduce fear of crime and only provided temporary relief, and it also emphasized that more sustainable social capital strategies were needed to increase social trust and solidarity to reduce fear of crime (Hernández et al., 2020).

Due to the fear of crime, people become lonely, withdrawn, socially isolated, and afraid of strangers. Thus, they cannot use their social networks or benefit from the necessary information sources (Vauclair & Bratanova, 2017). However, disaster resilience depends on the degree to which a person obtains, processes, understands, determines, and mobilizes the necessary information to cope with disasters (DiTirro, 2018). Therefore, the disaster resilience of individuals who experience fear of crime will also be negatively affected. Fear of crime partially mediates the relationship between social capital and disaster resilience, which reveals that we must evaluate individuals' resilience against disasters through social ties and their sense of emotional security. This result is consistent with the fact that fear of crime delays post-disaster recovery processes, as stated in a previous study (Farmer et al., 2018).

Similarly, other studies noted that increased fear of crime after a disaster leads individuals to withdraw from social life and thus weakens disaster resilience (Hino et al., 2018; Weil, 2020).

Some studies showed that crime rates and fear of crime increase post-disaster. This situation negatively affects the post-disaster recovery period, delays the transition of societies to everyday life, and reduces disaster resilience (Brodie et al., 2006; Farmer et al., 2018; Hino et al., 2018; Weil, 2020). Accordingly, a study carried out during the aftermath of the Great East Japan Earthquake also revealed that fear restricted access to shelters and essential resources, exacerbating social withdrawal and weakening community ties (Hino et al., 2018). Another study emphasizes that the increased fear of crime in the region after Hurricane Katrina damaged the sense of trust and cooperation, making the post-disaster recovery process more complex, and thus reducing individuals' disaster resilience (Weil, 2020). Therefore, increasing fear of crime will reduce a society's social capital and thus reduce disaster resilience in the literature, fear of crime negatively affected individual disaster resilience in this study.

Moreover, as revealed in this study, fear of crime partially mediated the effect of social capital on individual disaster resilience. In other words, fear of crime reduces the positive impact of social capital on individual disaster resilience. Even if individuals have a high level of social capital, their resilience to disasters diminishes to some degree if they fear crime. This finding indicates that efforts aiming to increase disaster resilience should not be limited to strengthening social capital alone; strategies to reduce individuals' fear of crime should also be developed. Accordingly, communication campaigns can be organized to increase the perception of security to strengthen social solidarity in postdisaster periods, and social programs that will support the public's sense of trust (e.g., establishing neighborhood solidarity centers and holding regular information meetings) should be implemented. In this way, the positive effect of social capital on disaster resilience can emerge more effectively without being weakened by the adverse impact of fear of crime.

This study fills an essential gap in the literature by addressing the relationship between social capital and disaster resilience through the fear of crime variable. While the literature usually analyzes the direct relationships between these two structures (Aldrich & Meyer, 2015; Cutter et al., 2016), this study develops a more holistic model by analyzing the intervening effect of fear of crime. Considering the findings achieved, it can be stated that social capital increases individuals' preparedness, resilience, and access to information against disasters, whereas fear of crime weakens this positive effect and negatively affects individuals' resilience. The present study reveals that disaster management policies should include physical resilience, social trust, and dimensions of security perception.

6. LIMITATIONS

Even though this study presents significant data, it also has several limitations. Firstly, the most fundamental limitation is that it was carried out in 2021 in the provinces of Burdur and Antalya, which

have not experienced a disaster that would mobilize social capital and make people fear crime. This limits the generalizability of the findings to different regions and post-disaster conditions.

Second, using face-to-face surveys as a data collection method may limit data objectivity and accuracy. Third, this study focused on the direct and indirect relationships between social capital, fear of crime, and disaster resilience. The impact of demographic and socioeconomic variables on the participants was excluded from the primary focus. More comprehensive models can be developed in future studies by adding such variables. Considering the limitations, it is recommended that subsequent studies expand their scope to include broader geographical areas and varied cultural contexts to strengthen the applicability and validity of the findings.

7. CONCLUSION AND IMPLICATIONS

This study answered all the intended questions with the findings that social capital increases individual disaster resilience (H1a) and decreases fear of crime (H1b), that fear of crime decreases individual disaster resilience (H1c), and that fear of crime plays a partial mediating role in the relationship between social capital and individual disaster resilience (H1d). The research questions posed at the beginning of the study were answered, and the findings were discussed in comparison with the literature. The partial mediation effect particularly underscores the critical importance of addressing the fear of crime to fully harness the benefits of social capital, with practical implications for disaster management and community development. These findings suggest that social capital is not only a predictor of disaster resilience but also plays a key role in reducing the negative psychological and social capacities and individuals' emotional security and social connectedness levels. Thus, these psychosocial dimensions should be integrated into disaster resilience models.

The findings achieved in this study reveal that disaster management strategies should not be limited to physical measures but should also include approaches to create an environment of social trust and to reduce fear of crime. Policy recommendations to increase disaster resilience and reduce the fear of crime should be based on concrete steps. In Türkiye, establishing neighborhood-based disaster volunteer groups and their active participation in disaster preparedness processes will strengthen social capital. To reduce security concerns, it is very important to increase temporary security patrols and establish community-based communication networks in cooperation with local governments and law enforcement agencies after a disaster. In addition, municipalities should organize community workshops and disaster processes. By providing accurate, timely, and transparent information, the public administration will also increase social trust by preventing post-disaster information pollution. Training programs should include disaster risks and the culture of community solidarity, trust building, and joint action. Thus, disaster resilience will be strengthened not only in physical but also in social dimensions.

Another problem that should be highlighted here is that the images of looting during disasters keep the fear of crime alive in society. Moreover, disasters may be associated with possible looting in societies with low social capital. For this reason, preventive measures against the risk of looting, which can be considered a social problem, may positively affect social capital and disaster resilience. Therefore, future studies should analyze the relationships between crime, looting, and disaster resilience. In this context, future studies on the relationships between looting, crime perception, and disaster resilience, especially in urban communities with low social capital. Future research should focus on disadvantaged groups, such as ethnic minorities, refugees, and older individuals, since investigating the unique experiences of these groups in disaster processes will contribute to a better understanding of structural inequalities in disaster risk reduction efforts. In addition, it is important to carry out long-term studies to monitor the changes in social capital and fear of crime before, during, and after disasters. Finally, more attention paid to the social and emotional impacts of disasters on individuals and communities would help deepen the understanding of the multidimensional nature of disaster resilience.

Ethics committee approval for the study was obtained from the Dokuz Eylül University Ethics Committee on April 27, 2021, with decision number E-87347630-640.99-48796.

The authors declare that the study was conducted in accordance with research and publication ethics.

The authors confirm that no part of the study was generated, either wholly or in part, using Artificial Intelligence (AI) tools.

The authors declare that there are no financial conflicts of interest involving any institution, organization, or individual associated with this article. Additionally, there are no conflicts of interest among the authors.

The authors affirm that they contributed equally to all aspects of the research.

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