

Social Vulnerability and Resilience of Disaster-driven Forced Migrants Aged 65 and Over: A Case of Kahramanmaraş Earthquake Survivors

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This study examines the social resilience of older adults who migrated to Istanbul after-math of the 6 February 2023 Earthquakes in Turkey. While many studies share the view that older adults are among the most vulnerable groups of people both in disaster and forced migration, a growing number of studies indicate the positive role of social capital for their resilience in disaster situations. In this study, 17 in-depth interviews and 40 structured interviews with senior earthquake survivors were conducted in Istanbul. The results of the thematic analysis of qualitative data and the descriptive statistical analysis of quantitative data show a central role of family ties (bonding social capital) for their resilience, yet a loss of social relations beyond close relatives (bridging social capital) and hence their increased dependency.

Keywords: social resilience, social vulnerability, social capital, older adults, disaster-driven migration

INTRODUCTION

This study examines the social vulnerability and resilience of the individuals aged 65 and over who migrated to Istanbul after the great Kahramanmaraş 6 February 2023 Earthquakes. The twin earthquakes affected a vast area of 11 provinces in South and South-Eastern regions in Turkey and forced 2.7 million people to evacuate outside the affected provinces (IOM 2023). Although it could be theoretically possible to prevent disasters with the help of the latest high technologies today, it is not viable in practice due to numerous economic and organisational challenges (Gökçe, Tetik 2012). This awareness has shifted the focus of disaster policymaking from prevention to resilience in the last two decades (UNISDR 2005).

According to a political-ecological approach, natural disaster is a catastrophe resulting from an intersection of natural hazard and social, economic and political systems (Wisner et al. 2004). Anyone could be affected by a disaster, yet its risks and effects are not distributed

equally among victims. Disaster makes existing vulnerabilities, disadvantages and inequalities explicit, often even worse (Wisner et al. 2004; Campbell 2007 a). Studies from different disciplines agree on the fact that older adults are one of the most physically, economically, socially and psychologically vulnerable groups in disaster (Campbell 2007 a; Barratt 2007; WHO 2008; Durant 2011; Bayraktar, Dal Yilmaz 2018). Older adults are also known to be among the most vulnerable in migration (Kett 2004). Migration is one of the common post-disaster strategies that survivors might opt for. Yet, like conflicts and war, disaster very often forces to migrate the individuals who are unwilling and unlikely to leave their hometowns in usual conditions. Older adults are one of such demographic groups. This unpreparedness could enhance their vulnerability. While migration may be a solution to escape from the immediate damage of disaster, it takes victims away from familiar environments, social networks and local support. This could be particularly challenging for older adults.

It is crucial to strengthen older adults' disaster resilience in the face of the rapidly aging world population. Population aging is no longer an issue only of advanced economies. Two thirds of the world population aged 60 and over will be living in low- or middle-income countries by 2050 (UN 2017). Turkey is also among the countries with the fastest aging populations (TURKSTAT 2013; Arun 2016). Besides, older adults are the least educated and the most impoverished age group in the country (Arun 2016), which indicates not only their physical but also socioeconomic vulnerability to disaster.

Physical and psychological vulnerabilities of older adults in disaster situations are relatively well-documented. However, their social vulnerabilities and strength in different stages and contexts of disaster are not sufficiently researched and hence more case-based studies are needed (Barratt 2007; Arja 2014; Duruel, Aşar Arık 2023; Ekoh, Walsh 2024). To fill this gap, this study examines the case of older adults who migrated to Istanbul aftermath of the Kahramanmaraş earthquakes and attempts to understand their vulnerabilities and resilience in post-migration recovery from their own experiences. It explores these questions: 1) What do senior survivors find difficult in the process of post-disaster recovery away from hometown? 2) What is the role of social capital when they try to cope with a new life?

A ROLE OF SOCIAL CAPITALS FOR OLDER ADULTS' RESILIENCE IN DISASTER SITUATIONS

Aging itself does not make an individual equally vulnerable (Durant 2011). Nonetheless, many studies report older adults' not only physical but also social vulnerabilities in disaster, such as social isolation and loneliness. Ay and Çetin's (2022) analysis of the elderly victims' experience of relocation after the 2020 Elazığ Earthquake shows older migrants' lasting attachment to their own homes and neighbourhoods and hence difficulty in adaptation. Aging in place is desired by many older adults since the familiar, inclusive and supportive social environment that they nurtured for years helps active aging and independent living (Timmermann 2012; Bascu et al. 2013; van Hoof et al. 2018). Displacement and relocation could be particularly disempowering experience for older adults (Tanida 1996; Gagné 2020; Kawachi et al. 2020; Gün Koşar 2023).

In the last two decades, disaster studies have discussed the critical role of social ties for older adults' resilience (Campbell 2007 b; Lebowitz et al. 2018; Kawachi et al. 2020). Social ties have been a central interest of sociological study since Durkheim (1893/1984; 1897/1951) and Tocqueville (1835/1969). In later years, scholars like Bourdieu, Coleman and Putnam conceptualised resourceful social ties as social capital in different contexts. While Bourdieu (1986) sees social connection and network as assets to reproduce class privilege, Coleman

(1988) defines social capital as resourceful social network that social actors mobilise for their well-being regardless of social class. Putnam (1993) highlights the moral value of social capital which facilitates reciprocity, coordination and cooperation in society.

In disaster studies, many scholars examine the way different types of social capital help victims' survival and recovery. They classify social capital into three types: bonding, bridging and linking (Aldrich 2012; Aldrich, Meyer 2015). Bonding social capital is a primary group, that is, family members, relatives, neighbours and friends. Bridging social capital is social ties that develop through institutions like schools, workplaces, religious organisations and non-governmental organisations. Linking social capital is social connections with people in power which help accessing public or private resources.

Many studies demonstrate that the type of social capital from which disaster victims benefit most is bonding social capital (Aldrich, Meyer 2015; Kaleem et al. 2016; Hsueh 2019; Kawachi et al. 2020). Bonding social capital is known to play a versatile role during and aftermath of a disaster in helping evacuation, rescuing victims and sharing food and shelters before rescue workers enter affected areas (Morrow 1997; Shaw, Goda 2004; Kamal, Hassan 2018). Some studies discuss the benefit of bonding social capital outside an affected area (Durant 2011). Durant's study (2011) in New Orleans aftermath of Hurricane Katrina found that those who had no ties outside the city evacuated at the latest and were most dependent on public assistance. Thus, the vital importance of bonding social capital indicates fatal consequences for those who lack such social ties (Kaleem et al. 2016; Kawachi et al. 2020).

Durmaz Yurt and Yeniçırak (2024) examined the use of different types of social capital among the survivors of the Kahramanmaraş earthquakes. They report that bonding social capital played a critical role in the first days of the disaster before rescue teams came in. As observed in Durant's study (2011), those who lacked bonding social capital outside the affected area had no choice but to stay in tent cities. In later periods, however, the aid of non-governmental organisations and political parties made great differences for them. The cases of Hurricane Katrina also demonstrate the difficulty of accessing formal resources for disadvantaged social groups due to the lack of bridging and linking social capitals. Low-income African Americans intensively used bonding social capital aftermath of the disaster, yet class and racial barriers prevented them from accessing useful information and aids outside a circle of family members and close friends with similar limited resources, which negatively affected their recovery in the long term (Hawkins, Maurer 2010; Elliot et al. 2010).

Currently Turkey's elderly population is the most disadvantaged age group in terms of cultural capital (Arun 2009, 2016; Arun et al. 2022). The considerably low levels of education and digital literacy among this age group lead to their disadvantages in accessing information, resources and services in the rapidly digitalising world. Older women are particularly vulnerable in this regard (Arun, Arun 2011; Arun et al. 2022). It indicates the great significance of bonding social capital for older adults during and after disaster. Yet research on older adults' experiences of disaster, social vulnerabilities and resilience is still considerably limited in Turkey (Duruel, Avşar Arık 2023). The current study would contribute to filling this gap.

MATERIALS AND METHODS

This study is designed as an exploratory research which seeks to understand older disaster-driven forced migrants' social vulnerability and resilience. The research developed into three stages and used sequential mixed methods (Teddlie, Tashakkori 2011: 293). Two sets of data, qualitative and quantitative, were collected by in-depth and structured interviews

in Istanbul between 1 November and 31 December in 2023 and in September 2024, respectively. Interviewees were selected by purposive sampling. Sampling criteria were 1) the survivors of Kahramanmaraş earthquakes, 2) persons aged 65 and over, and 3) the migrants who moved to Istanbul after the earthquakes. In addition, socio-demographically different individuals in terms of gender, education and income level were tried to be included. Considerable difficulties in reaching the earthquake survivors who meet the sampling criteria and are willing and able to participate in the study resulted in the small sampling sizes. A small and non-representative sample of quantitative data is the limitation of our study. Nonetheless, this exploratory study would provide valuable information for further research on disaster resilience.

In the first stage of the research, in-depth interviews were conducted with 17 earthquake survivors aged 65 and over to understand their post-migration adaptation and the role of social ties (research questions 1 and 2). A semi-structured interview form contained a list of demographic and open-ended questions regarding post-migration experiences. Interviews were voice-recorded with the participants' informed consent. Recorded interviews were transcribed and then coded by recurrent themes (open-coding). Thematically coded narratives were classified under two major categories of vulnerability and resilience, and then the similarities and differences of post-migration experiences were examined by gender and educational level (axial-coding).

The qualitative data showed the participants' appreciation of familial ties, on the one hand, and longing for their neighbours, friends and hometowns, on the other hand. To answer an emerging question out of this paradoxical experience, 'Are familial ties sufficient for social resilience?', a structured interview was conducted with 40 senior migrants as the second stage of the research. A questionnaire consisted of 44 close-ended questions about socio-demographic information, living conditions, social ties, access to earthquake relief and a subjective evaluation of adaptation. The questions were designed to measure the participants' bonding and bridging social capitals as well as economic capitals.

Data entered in SPSS Version 21 were analysed by descriptive statistics. Four items of monthly household income, pension, social security and the subjective sufficiency of basic needs were re-coded into ordinal variables to categorise the respondents' economic status. Ten items (1. marital status, 2. the number of children, 3. if adult child/ren live in Istanbul, 4. household structure, 5. if a respondent sees anyone other than household members in daily lives, 6. if neighbours help when needed, 7. the number of family members who a respondent talks on the phone or face to face at least once a month, 8. the number of friends who a respondent talks on the phone or face to face at least once a month, 9. the number of family members who a respondent can call for a help when needed, 10. the number of friends who a respondent can call for a help when needed) were re-coded to calculate 'bonding social capital score'. For example, marital status was re-coded into 0 (never married), 1 (widow/er), 2 (divorced), 3 (separated), 4 (non-official Islamic marriage) and 5 (married). A sum of ten social tie items were evaluated as a respondent's social capital score from low (0–10) to high (30+). Bridging social capital was estimated from the access of cash and non-cash earthquake relief from groups and organisations other than public institutions.

In the final stage, the triangulation of thematic analysis and descriptive statistical analysis was conducted for a more comprehensive understanding of the role of social capitals in post-disaster/migration recovery.

SOCIODEMOGRAPHIC CHARACTERISTICS OF RESEARCH PARTICIPANTS

Participants of in-depth interview

The age of interviewees ranges from 65 to 82. Ten participants were male, and seven were female. All but one were married. Three women and two men were primary school graduates, one man and one woman were middle school graduates, five men and two women were high school graduates, and two men and one woman were university graduates.

Respondents of structured interview

The age of respondents was between 65 and 85. Twenty-three respondents were female, and 17 were male. Twenty-nine respondents were married. The rest were widowed, divorced or separated from a partner. The mode of the number of children was four. Two women had no children. Twenty-six respondents had grown-up children living in Istanbul. Half of the households were nuclear. Only four respondents stayed with married children. Eleven respondents lived with their spouses. Five lived alone. The mode of educational level was middle school. Five respondents, all women, were illiterate. Over a quarter of the respondents' household income was less than the lowest pension which is far less than the minimum wage. Thirty-three respondents replied 'very hard' or 'hard' to make a living. Sixteen had no social security. More than half of the respondents replied that a state of general health was 'bad' or 'very bad'.

SOCIAL VULNERABILITIES

A loss of social circle and increased dependency

Almost all the participants of the research spent most of their lives in their hometowns in the Southern or South-Eastern region of the country. The participants of in-depth interviews, particularly women of lower educational attainment, found the lives of the metropolitan city foreign, overwhelming, complicated and unfriendly. P7 (66, primary school) could not go out by herself: 'Here is very crowded and very chaotic. I have no courage to go out alone for fear that I'd get lost. We are kind of dependent on our children.'

At the time of the research, the inflation rate was soaring. Above all, the cost of living in Istanbul was one of the highest in the country (Tüylüoğlu, Albayrak 2010: 210). Many interviewees expressed economic difficulties and their restricted movement in the city:

'It's economically difficult to go from one place to another. It's very expensive. I must use public transport to go to the Maraş Hometown Association ... Sometimes I must go by taxi, which is expensive for me. But I can't find anything else to do if I don't go there' (P5: 67, male, high school).

Not only the bustle of the city and the high cost of living but also unfamiliar neighbourhoods deprived them of social life. P1 (65, female, primary school) described a life in Istanbul as 'like living in a box'. Others, especially men, needed but had difficulty in making new social relationships: 'I took part in some events with my wife's help, but I didn't like people's attitudes' (P4: 68, male, university); 'I'm looking for someone to talk to, someone like us. But people are so different. They find my culture and accent weird' (P5: 67, male, high school).

A loss or shrink of a social circle after a sudden involuntary migration increased the participants' dependency, especially on their children, even for basic daily tasks from going out to accessing services. Such dependency may cause psychological distress: 'I see myself as a burden

to my daughter. I see that they also struggle both materially and mentally and worried. I feel this and can't sleep some nights' (P6: 66, female, middle school). Unfamiliar environment, a shrink of a social circle and a sense of reduced independence deepen their homesickness and make their adjustment difficult: 'I've been having difficulty in adjusting since I came to Istanbul. I constantly suffer from homesickness' (P1: 65, female, primary school). Despite his economically comfortable life, P14 (68, male, high school) expressed his homesickness as follows: 'A robin was put in a golden cage. Then it sang, 'Oh, my hometown. Ours is also this sort of situation.'

SOURCES OF SOCIAL RESILIENCE

Familial ties

While older migrants' increased dependency on their close relatives as disaster victims and newcomers in Istanbul indicates their social vulnerability, it also shows that familial ties are a vital source of support in post-migration recovery. In many cases, children invited and helped their parents to settle in Istanbul. Participants expressed how they were comforted by spending time with their grand/children: 'An idea of being a burden for his family wears us out, but we are safe and comfortable here. ... We live close to our children here at least. Grandchildren, too. They are a great consolation for us although we miss our hometown very much' (P7: 66, female, primary school).

Place of belonging

A few interviewees, notably women of higher educational attainment, actively looked for a place to socialise and build a new social circle. P3 (female, 67, university) is a retired teacher. She took part in the art and vocational courses of the municipality. She also teaches children in the neighbourhood. P17 (68, female, high school) participated in courses and other communal activities to make new friends. Men seem to be reluctant to make a new social circle as seen in the cases of P4 and P5 above. Instead, some men visit hometown associations for socialisation. Like P5 (67, male, high school), P2 (66, male, high school) became a member of a hometown association after he moved to Istanbul: 'I feel a bit more like I'm home when I see people from our hometown. So, I spend most of my day there.'

SOCIAL CAPITALS OF OLDER DISASTER-DRIVEN FORCED MIGRANTS

The result of structured interview also shows older migrants' strong bonding social capital. All the respondents talk on the phone or face-to-face with family member(s) outside the household at least once a month and two thirds have three and more such family members. Thirty-four respondents call friends 'often' or 'always'. All but two have at least one family member (avg. 2.8) they can call for any help. Most respondents have at least one friend who they feel free to call for any help (avg. 1.3).

The respondents' bonding social capital score ranges from 10 to 34 (avg. 22.7). The level of the scores seems unrelated to educational attainment and economic status. Probably it is due to the overall high bonding social capital among the participants in agreement with qualitative data. It is, however, worth noting that two women who had no children had a significantly low social capital score, 10 and 11. Interestingly, the score of bonding social capital is not related to the degree of getting used to a new life in Istanbul. Most respondents replied that they could not get used to Istanbul regardless of the scores of social and economic capitals as well as education (Table).

Table. The numbers of the respondents who considered that they were adjusted to a life in Istanbul by social and economic capital scores

'Got used to'	Social capital score group				Economic capital score group		Educational attainment				
	0-10	11-20	21-30	31+	Below 10	10 and over	Illiterate	Primary	High school	Uni.	Total
No	1	6	19	4	20	10	5	18	5	2	30
Yes	0	4	4	2	5	5	0	7	2	1	10
Total	1	10	23	6	25	15	5	25	7	3	40

The respondents have very few bridging social capital. Almost all have no social relations beyond family and relatives in Istanbul. The majority of the respondents have no neighbour relations. Twelve respondents said that their neighbours did not lend a hand when needed while 18 respondents replied that they had not needed any help from neighbours. Their leisure time activities are mostly 'looking after grand/children' and 'visiting relatives'. There are only four male respondents who had social activities other than relatives. Two men were going to a religious leaning gathering (*sohbet*) and another two men to a coffee house. There are only four and three respondents who could access cash and non-cash earthquake relief, respectively, from non-governmental organisations. Seven respondents, all of whose economic scores are below half the highest score, could access no aid at all either from public or non-governmental organisations.

CONCLUSIONS

The disaster-driven older migrants in our study are the case that familial network and intergenerational solidarity functioned well as a disaster social capital. They quickly settled in safe and comfortable houses away from the infrastructural damage and social and economic disruption of the earthquakes. Their vulnerabilities that resulted from abrupt involuntary migration were reduced by their bonding social capital. However, the study shows that its versatility and close-knit network resulted in their intensive dependency on a small circle of social relations.

Social capital is a significant resource, particularly for those who have the limited cultural and/or economic capital. For example, the study of 324 senior survivors five years after the April 2015 Nepal Earthquake identified literacy, regular income, being married and perceived social support had significant positive effects on resilience (Timalsina et al. 2021). The cases of Japan demonstrate that weak social ties could result in a prolonged displacement and social isolation of the disadvantaged such as older adults with low incomes (Tanida 1996; Gagné 2020; Kawachi et al. 2020).

The current study demonstrates older migrants' desperate desire for a social circle which they feel belonging and spend time with. A few participants of a high educational attainment attempted to make new social circles through non-profit organisations, such as hometown associations, courses at an adult education centre and religious-leaning gatherings. These attempts are encouraging examples for older adults' post-disaster/migration recovery considering the significance of communal spaces for disaster resilience observed in some studies (Aldrich 2015; Kiyota et al. 2015; Qi, Gu 2020).

Disaster makes existing vulnerabilities explicit (Wisner et al. 2004; Campbell 2007 a). Our findings expose the weakness of civil society in Turkey. Indeed, they indicate both the strength of a family-centric society in which intergenerational solidarity buffers rapid social changes and crises (Kalaycioğlu, Rittersberger-Tilic 2000) and the need for re-evaluating its limited role and exclusionary property. Bonding social capital is inherently a narrow, homogeneous and closed network. Therefore, it is often unable to meet the needs of information, resource, service and support which develop in later stages of disaster as Durmaz Yurt and Yeniçırak (2024) show.

This study restates the importance of bonding social capital for older disaster victims. At the same time, it argues that developing diverse communal spaces for economically and socio-culturally heterogeneous older adults would strengthen their social resilience in future crisis situations in a family-centric society like Turkey.

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MIKI SUZUKI HIM, ŞERIF ESENDEMİR

65 metų ir vyresnių priverstinių migrantų socialinis pažeidžiamumas ir atsparumas nelaimėms: Kahramanmarašo žemės drebėjimą išgyvenusių asmenų atvejis

Santrauka

Šiame tyrime nagrinėjamas vyresnio amžiaus suaugusiųjų, kurie po 2023 m. vasario 6 d. žemės drebėjimo Turkijoje migravo į Stambulą, socialinis atsparumas. Nors daugelyje tyrimų pritariama nuomonei, kad vyresnio amžiaus suaugusieji yra viena pažeidžiausiai žmonių grupių tiek nelaimių, tiek priverstinės migracijos atvejais, vis daugiau tyrimų rodo teigiamą socialinio kapitalo vaidmenį jų atsparumui nelaimių atvejais. Šiame tyrime Stambule buvo atlikta 17 giluminių interviu ir 40 struktūruotų interviu su vyresnio amžiaus žmonėmis, išgyvenusiais žemės drebėjimą. Kokybinių duomenų teminės analizės ir kiekybinių duomenų aprašomosios statistinės analizės rezultatai rodo, kad šeimos ryšiai (rišamasis socialinis kapitalas) vaidina pagrindinį vaidmenį jų atsparumui, tačiau kartu jie yra praradę platesnius socialinius ryšius (jungiamąjį socialinį kapitalą), ir dėl to padidėja jų priklausomybė.

Raktažodžiai: socialinis atsparumas, socialinis pažeidžiamumas, socialinis kapitalas, vyresnio amžiaus suaugusieji, nelaimių nulemta migracija