

SOCIAL ISOLATION AND COMMUNICATION GAPS WITHIN URBAN COMMUNITIES – A CASE STUDY OF GUJRANWALA**Meh Jabbin ^{*1,2}, Amber Javed ²**¹Kashf Foundation, Lahore, Pakistan²Department of Sociology, University of Sargodha, Pakistan

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ABSTRACT

Social isolation is a widespread problem with serious consequences. Nonetheless, there are a number of ways to deal with it. Creating social infrastructure is an important strategy to help avoid loneliness. Through the analysis of social surveys and statistical data from the city of Gujranwala in Central Punjab, this study sought to investigate how urban infrastructure affects social isolation. To determine the infrastructural features required to reduce social isolation, we integrated data at the individual and regional levels. The analysis showed that individual factors including gender, age, marital status, and household income were significant. These findings indicate that social infrastructure plays a vital role in influencing social isolation. Therefore, it is essential to plan urban spaces and design infrastructure that effectively mitigates social isolation.

Keywords: Social isolation, Gujranwala, Social infrastructure, Urban community^{*}Corresponding Author. E-mail: meh.jabbin@kashf.org**INTRODUCTION**

As social isolation continues to rise globally, governments are stepping up their efforts to address this pressing issue. In contrast to earlier times, social isolation is today acknowledged as a serious issue that calls for legislative action. For example, Japan nominated a Minister for Loneliness in 2021, after the UK did so in 2018. Investigating efficient strategies to reduce the hazards associated with social isolation is crucial, as it can result in negative health outcomes [1] and the occurrence of lonely deaths. The Act on the Prevention and Management of Lonely Deaths was passed by the South Korean Ministry of Government Legislation in 2021. Although their full practical effects are still unknown,

these strategies go beyond a focus on individual variables to highlight the role of the social environment in preventing isolation. According to Carstensen et al. [2], organizing spaces with diverse functions and activities can help reduce both social and physical isolation among urban residents.

It is becoming more widely acknowledged that social isolation is an urban problem rather than just an individual one. With an emphasis on particular age, gender, and socioeconomic groups, the majority of research has focused on finding personal traits linked to social isolation. However, urban contextual elements like the availability of social networking venues



can have an impact on individual behaviors connected to social isolation. Some studies have looked at how the urban environment affects social connections in order to overcome the drawbacks of concentrating only on individual traits. Defining social isolation as a deprivation of social connectedness, while it highlights that the planning of urban environments can significantly affect social relationships [3, 4].

Since the start of the coronavirus disease 2019 (COVID-19), social isolation has gained more attention as a serious social problem [5]. Although social isolation is mostly a personal experience, the environment in which a person lives has an impact. Social bonds are diminishing in urbanized regions. The accessibility and character of the areas where people carry out their everyday activities frequently determine their capacity to interact in person and build social relationships [6]. According to recent research [7], certain neighborhoods have superior social infrastructure that promotes the development of relationships, which may lead to health differences between communities.

This study aims to integrate individual and regional factors influencing social isolation within a multilayered framework and to assess how regional factors affect social isolation. We analyzed data from 410 respondents participating in the social survey, taking into account individual characteristics that contribute to social isolation, as highlighted in previous research, alongside regional factors where the respondents resided.

This study is organized as follows: Initially, we examine the theoretical underpinnings pertaining to individual and regional factors as well as the conceptual definition of social isolation. Second, we describe our methodology, which takes into account both individual and regional aspects when analyzing social isolation using a multilevel logistic model. Third, we show the findings of the investigation, highlighting the

regional and individual factors that influence social isolation. We conclude by outlining the significance of the factors found in the analysis and talking about the ramifications of our findings [8].

Two important insights are offered by the literature on social infrastructure and social isolation. Initially, the elements that impact social isolation can be divided into distinct biological, behavioral, and socioeconomic components that interact with each other. In these socioeconomic situations, social connections are significantly shaped by urban environmental elements. The impact of these urban characteristics varies by geography and research area, and they can be further separated into residential and neighborhood aspects.

Second, tackling social isolation requires social infrastructure. When it comes to social infrastructure, urban planning has historically concentrated on physical infrastructure such as roads, railroads, and schools.

Nonetheless, recent discussions have emphasized how crucial social infrastructure's networked form is for encouraging human connection. This connection demonstrates how social networks and individual behaviors can be impacted by infrastructure [9, 10].

In this study, we looked at characteristics associated with the social isolation-influencing factors found in the literature. To investigate their relationship, we combined two components with different units of analysis into a single model.

MATERIALS AND METHODS

Several municipalities in Gujranwala—representative metropolitan areas in Gujranwala city where citizens are at danger of social isolation—were included in the study. The variables and data are arranged as follows. Participants in the social survey who were 25–65 years of age were the main focus. Age groupings, genders, educational attainment, and economic activities were used to group the respondents.

We examined answers to the survey question, "Is there anyone you can turn to for help in times of need?" in order to gauge the dependent variable, social isolation. A binary variable was used to characterize the responses: "yes" meant the respondent was not socially isolated, and "no" meant they were. Both individual and regional classifications were applied to the independent variables.

Previous studies have identified several individual variables that may influence social isolation, including age, gender, residence, marital status, educational level, employment status, and monthly income [11].

They have also looked at socioeconomic factors such age, gender, race/ethnicity, family income, education, marital status, and household status [12]. Furthermore, social networks, or social infrastructure, are acknowledged as a regional component that can influence social isolation [13]. We used individual factors from social survey data, such as age, gender, household income, educational attainment, married status, and economic activity, in accordance with prior studies. We took into account social infrastructure components for regional variables, including the amount of parks, cultural and sports facilities, welfare facilities, and the travel time to a traditional market. We also took into consideration the situation of the capital region, the ratios of single-person households and multifamily apartments.

We used a multilayer logistic model for our investigation. Predicting an individual's likelihood of experiencing an event based on a certain binary dependent variable is the aim of logistic regression. The statistical reliance of an individual's probability on their residential zone is recognized using a multilevel logistic model. Our goal was to investigate how social isolation is influenced by both personal traits and area social infrastructure.

Stata 16 (StataCorp., College Station, TX, USA) was used for all analyses. The following order was followed in the

analysis: To evaluate multicollinearity, we first computed the variance inflation factor and conducted a basic statistical analysis of each variable to comprehend its properties. Next, we computed the intraclass correlation coefficient (ICC) to evaluate the explanatory power of the dependent variable at the regional level. After running the multilevel logistic model analysis, we recalculated the ICC to assess the explanatory power of the regional-level variables. Finally, we obtained the marginal effects [13-17].

RESULTS AND DISCUSSION

A overview of the fundamental statistical analysis is given by the data. There were 410 responders in all, with 20% of the sample being female. The percentage of those 60 and older was 40%. Regarding education, 34.1% of those surveyed had a bachelor's degree or more. For every 10,000 residents, there were 0.10 cultural/sports facilities, and 0.19 welfare facilities. In order to accomplish this, we used first-level individual components to compute the intraclass correlation coefficient (ICC). This indicates that regional variables were appropriately selected, as they accounted for almost half of the geographic influence on social isolation.

Social isolation was shown to be significantly influenced by gender, age, married status, and average monthly household income, according to preliminary analysis of individual variables. In particular, the likelihood of social isolation was 5.2% higher for men than for women. Access to conventional marketplaces, the proportion of single-person households, and whether the area was a part of the capital region were all important regional considerations. A 23% increase in the likelihood of social isolation was associated with a higher proportion of single-person families. Additionally, the chance of experiencing social isolation decreased for every additional hour spent traveling to traditional markets. Finally, compared to people in the capital region, those who lived in non-capital regions had

an 14.3% decreased chance of experiencing social isolation.

The results show that men, older adults, single people, and those with low incomes are more likely to experience social isolation. Our study supported earlier findings that older people are more vulnerable to social isolation and that men are more likely than women to suffer it. On the other hand, encouraging neighbors to communicate and support one another can help keep older persons from being socially isolated [18]. Women are more likely to be active in social networks, such as family and friends, which can protect them against social isolation even as they age. On the other hand, because they have less social resources and fewer encounters, older men might be more vulnerable to social isolation [19].

Physical discomfort, a decrease in income, and retirement-related worry are few other factors that can limit social interaction. In order to provide a range of supportive services, local governments should expand their welfare personnel and foster related enterprises as the population ages and the number of elderly people at danger of social isolation rises.

Due to the fact that unmarried people frequently lack the capacity to establish new social networks through spouses, children, and their spouses' family and friends, we found that they are more likely to experience social isolation than married people. In contrast to marriage, experts pointed out that being single can have advantages since it frequently results in more regular interactions with parents, siblings, neighbors, and friends, strengthening social ties [20].

Therefore, compared to earlier times when marriage was the norm, there might be greater social ties among unmarried people in a modern culture when the number of single people is rising. Therefore, it is likely that other factors are more important than merely attributing the likelihood of social isolation to being single. In order to distinguish between individuals who are at

danger of social isolation and those who are not, as well as to create customized solutions to address their particular situations, it is imperative to evaluate the status and conditions of the unmarried population.

Participation in a range of social activities that could promote social relationships is restricted when household income is low. A smaller social network may result from this, raising the possibility of social isolation.

Urban planning should aim to provide accessible facilities for all, enabling low-income individuals to naturally form social networks within the city, even if they do not engage in activities specifically designed for this purpose. For example, improving community involvement is essential when building facilities like libraries, and when planning programming, it's critical to support initiatives like reading clubs and discussion groups that promote interaction between people from different backgrounds.

At the regional level, the percentage of single-person households, access to traditional markets, and the status of the capital region were important factors, but parks, cultural and sports facilities, welfare centers, and places of worship—often regarded as elements of social infrastructure that contribute to community building—were not. As the percentage of single-person homes increases, so does the danger of social isolation. Single-person households may be isolated from these important networks, increasing their risk of social isolation, since family and friends are the main social groups in any culture and are supposed to meet people's social needs and sense of belonging [21-23]. As a result, it's critical to help single-person homes build a network of interacting relationships. This necessitates setting up urban social infrastructure to facilitate more organic connections and offer forums for discussion.

Short travel times to traditional markets were linked to increased social isolation. The establishment of traditional markets

has typically involved a lengthy historical process, making them more prevalent in older, less-developed areas. Large commercial facilities are frequently found in newly created communities instead of traditional markets, which can put inhabitants at a distance from already-existing marketplaces. Socially vulnerable groups, like older persons living alone, are more likely to experience social isolation in older areas. This study illustrates how, ironically, having easy access to traditional markets can increase social isolation. Thus, traditional markets can be made more effective by reorganizing them as essential parts of social infrastructure. Reviving historic markets can improve small communities and encourage social interaction, which can lessen isolation, as opposed to constructing new facilities in deteriorating areas [24-26].

In the capital region, residents exhibited a higher propensity for social isolation compared to those in non-capital areas. Overcrowding, greater competition, and a drop in quality of life as a result of longer commutes are the causes of this issue. Competition has increased in a number of spheres of life, including as education, work, and income, as a result of migration from non-capital areas to the capital. People who suffer are frequently forced to the periphery, where their chances for social interaction are restricted by lengthier commutes. A deterioration in quality of life exacerbates this problem and makes social isolation even worse. Promoting balanced regional development in non-capital areas is necessary to address this underlying issue and encourage population dispersal away from the capital. People have more physical and mental space when populations are dispersed and competition is reduced, which can improve social contact and lessen social isolation [27 28]. To encourage organic connections between apartment inhabitants and visitors, public walkways must to be expanded and enable inhabitants to interact with the outside world and participate in community

activities, hence lowering the danger of social isolation.

The inability to include extra control variables for the target sample is another drawback. It is crucial to take into consideration the physical and mental health issues that have been associated with social isolation [29], but this was not feasible because the social survey in the chosen cities lacked pertinent questions. Furthermore, considering that people frequently use adjacent facilities, a smaller geographical unit might have been more appropriate, even though we selected municipalities as the level of regional study. Sadly, neighborhood-level analysis was not possible due to data collecting limitations, underscoring the necessity for further study to overcome this restriction.

CONCLUSIONS

According to our research, the chance of social isolation was higher for men, older people, single people, and those with lower incomes. In terms of geographical features, regions with a higher proportion of single-person households and easier access to conventional markets were more affected by social infrastructure. On the other hand, social isolation did not significantly correlate with the presence of parks, cultural and sports facilities, social welfare centers, or multifamily housing.

These results have significant implications for further investigation. Our study is important because it captures the intricate relationships between different factors influencing social isolation by looking at both individual samples and the regions where respondents live, whereas previous research has primarily used multinomial models to analyze social isolation along with individual or regional characteristics separately. This study also identifies areas where Gujranwala's social infrastructure should be improved. Our study found no significant correlation between social isolation and parks, cultural/sports facilities, and welfare centers—all of which are commonly regarded as crucial elements of social infrastructure that promote

cohesive communities and lessen social isolation. This underscores the inadequacy of the current distribution of such facilities and emphasizes the necessity for thoughtful planning and development of future social infrastructure aimed at enhancing social interaction within local communities.

Lastly, we suggest urban planning techniques to reduce urban social isolation. A more integrated strategy that takes into account the interconnection of social infrastructure is necessary for effective urban planning, moving the emphasis of social infrastructure provision away from merely quantitative expansion. Improving access to facilities and making sure that the services and programs provided encourage more interaction between residents are two

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ways to strengthen this networked aspect. The well-being of urban residents can ultimately be enhanced by such well-designed social infrastructure, which can act as a universal resource for all citizens.

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