

# The Relationship Between Social Isolation, Psychological Resilience, and Psychological Well-Being Among Older People in the Community

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**Abstract:** *Objective:* To explore the relationship between social isolation, psychological resilience, and psychological well-being in community-dwelling older adults. *Methods:* A questionnaire survey was conducted with 265 community-dwelling older adults using the Social Isolation Scale for the Elderly (C-SIS), the 10-item Brief Psychological Resilience Scale, and the Comprehensive Happiness Questionnaire (MHQ). The results were statistically analyzed using SPSS 27.0. *Results:* The highest score on the Social Isolation Scale for Community Elderly was 23, with a mean entry score of  $2.36 \pm 0.62$ . A score of 14 was the cut-off point, with scores of  $\leq 14$  classified as social isolation. There were 136 cases with scores below 14, resulting in a social isolation incidence rate of 51.3%. The median (P50) psychological resilience score was 27, indicating a higher level of resilience. The total score on the Psychological Well-being Scale was 161, suggesting a moderate to slightly higher level of well-being. Social isolation had a direct negative effect on psychological well-being, while psychological resilience had a positive effect. *Conclusion:* Older adults should be supported in reducing the incidence of social isolation and increasing psychological resilience to enhance psychological well-being and promote successful aging.

**Keywords:** Community; Older people; Social isolation; Psychological resilience; Psychological well-being

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## 1. Introduction

According to the National Bureau of Statistics, China's population reached 1,411,750,000 at the end of 2022, with 19.8% of the population aged 60 and over, and 14.9% aged 65 and over<sup>[1]</sup>. As life expectancy increases, older adults also aspire to achieve a higher level of psychological well-being. However, as individuals age,

their social networks in the community gradually shrink, either through active or passive disengagement from social groups, leading to social isolation. Social isolation can cause negative emotions, adversely affecting both physical and mental health, and diminishing psychological well-being <sup>[2]</sup>.

According to Ryff's theory, psychological well-being consists of autonomy, environmental mastery, building positive relationships, having a purpose in life, personal growth, and self-acceptance <sup>[3]</sup>. Studies have shown that social isolation is negatively correlated with an individual's psychological well-being, and psychological resilience may act as a protective factor in this process <sup>[4]</sup>. Psychological resilience refers to an individual's ability to successfully adapt to significant changes, threats, or adversity. This study aims to explore the relationship between social isolation, psychological resilience, and psychological well-being in older adults, to mitigate the negative effects of social isolation and improve the quality of life for older adults, ultimately providing a reference for achieving successful aging.

## **2. Materials and methods**

### **2.1. General information**

From November 2023 to March 2024, a convenience sampling method was used to survey 265 older adults in a community in Baoding City, Hebei Province, as the study population. The inclusion criteria were: (1) aged 60 years and above; (2) no mental or cognitive dysfunction; (3) no major medical conditions that might affect the assessment of physical function; (4) ability to walk independently (with the use of mobility aids such as crutches if necessary); and (5) informed consent and voluntary participation. The exclusion criteria were: (1) individuals with mental illness or intellectual disability; (2) individuals with hearing impairments or communication difficulties; (3) individuals with poor comprehension who were unable to understand the study content after repeated explanations; and (4) individuals with incomplete survey data. A total of 265 questionnaires were effectively recovered. All respondents signed an informed consent form, and the study was approved by the Ethics Committee of the Affiliated Hospital of Hebei University (approval number HDFULL-KY-2024-101).

### **2.2. Research methods**

A questionnaire survey method was employed. To avoid potential bias, all information was collected face-to-face by enumerators who were uniformly trained prior to data collection. A standardized instruction set was used to explain the purpose and significance of the study and obtain the cooperation of the elderly participants. During the information collection process, a unified guideline was applied to answer data queries and ensure consistency.

### **2.3. Research tools**

#### **2.3.1. General information questionnaire for the elderly**

A self-developed questionnaire was used to gather data on gender, age, ethnicity, education, type of occupation, marital status, chronic illnesses, history of surgery, use of mobility aids, children's status, residence, monthly income, hobbies and interests, and attitudes toward aging in the community.

#### **2.3.2. Social Isolation Scale(SIS)**

The English version of the Social Isolation Scale for Older Adults was developed by Dr. Nicholson in the

United States in 2019 to assess social isolation in older adults over the past month. In 2021, Pang Hui translated and tested the reliability and validity of the scale, resulting in the C-SIS, which includes two dimensions: connectedness and a sense of belonging. Each dimension contains three items, using a 5-point Likert scale. The first three evaluation indicators are rated as 0 = 0, 1 = 1, 2 = 2–3, 3 = 4–5, and 4 = 6 or more, while the last three indicators are rated as 0 = strongly disagree, 1 = somewhat disagree, 2 = neutral, 3 = somewhat agree, and 4 = strongly agree. Item 5 is reverse-scored. The total score ranges from 0 to 24, with lower scores indicating more severe social isolation. After translation, the scale had a content validity index (S-CVI) of 0.97, Cronbach’s alpha coefficient of 0.763, and dimension-specific alpha coefficients of 0.730 and 0.707, with a retest reliability of 0.936, indicating good reliability and validity.

### 2.3.3. 10-item Brief Psychological Resilience Scale

The 10-item Brief Psychological Resilience Scale (CD-RISC-10) was used to assess participants’ psychological resilience. The CD-RISC-10 is a simplified version of the 25-item Psychological Resilience Scale developed by Campbell-Sills, Connor, and Davidson. It is a one-dimensional scale with concise items, offering good stability and reliability for use with Chinese populations. The scale uses a 5-point rating system: 0 = never, 1 = rarely, 2 = sometimes, 3 = often, and 4 = almost always. The total score ranges from 0 to 40, with higher scores indicating greater psychological resilience.

### 2.3.4. The Multiple Happiness Questionnaire (MHQ)

The psychological well-being subscale of the Comprehensive Happiness Questionnaire (CHQ), compiled by Miao Yuanjiang, was used in its entirety or with individual psychological well-being modules selected as per the study’s objectives [5]. When applied to older adults, the internal consistency and split-half reliability of the scale are robust. The 33-item scale covers six dimensions: vitality, health concerns, self-worth, friendly relationships, altruistic behavior, and personality growth. A 7-point scale was used (1 = obviously not; 2 = not; 3 = somewhat not; 4 = moderately; 5 = somewhat compliant; 6 = compliant; 7 = obviously compliant), with factor scores calculated as the total score for each dimension divided by the number of items. Factor scores ranged from 1 to 7.

## 2.4. Statistical analysis

SPSS 27.0 was used for data analysis. Pearson correlation or Spearman correlation analysis was conducted to explore the relationships between social isolation, psychological resilience, and psychological well-being.

## 3. Results

### 3.1. General information

Table 1 shows the general information of the study subjects.

**Table 1.** General information about the study subjects

Variables	Groups	Number of people ( <i>n</i> )	Composition ratio (%)
Gender	Male	136	51.3
	Female	129	48.7

**Table 1 (Continued)**

Variables	Groups	Number of people ( <i>n</i> )	Composition ratio (%)
Age	60–69	148	55.8
	70–79	82	30.9
	≥ 80	35	13.2
Ethnicity	Han	240	90.6
	Minorities	25	9.4
Education level	Primary school and below	122	46.0
	Middle school	95	35.8
	High school or technical secondary school	35	13.2
	College degree or above	13	4.9
Type of occupation	Mental	60	22.6
	Physical	147	55.5
	Mental and physical	58	21.9
Marital status	Have a spouse	226	85.3
	No spouse	39	14.7
Chronic medical conditions	None	62	23.4
	One	103	38.9
	Two	59	22.3
	Three or more	41	15.5
Surgical history	Absence	182	68.7
	Presence	83	31.3
Walking aids	Presence	77	29.1
	Absence	188	70.9
Number of children	0	16	6
	1	57	21.5
	2	100	37.7
	≥ 3	92	34.7
Residency status	Living alone	31	11.7
	With spouse	158	59.6
	With children	65	24.5
	With spouse and children	9	3.4
	Four generations in the same house	1	0.4
	With dependent families	1	0.4
Monthly income (Chinese yuan)	< ,3000	154	58.1
	3,000–6,000	74	27.9
	> 6,000	37	14.0

**Table 1 (Continued)**

Variables	Groups	Number of people ( <i>n</i> )	Composition ratio (%)
Hobbies	None	75	28.3
	One	69	26.0
	Two or more	121	45.7
Community attitudes to care for the elderly	Dissatisfied	11	4.2
	General	132	49.8
	Satisfied	122	46.0

### 3.2. Social isolation of elderly

The C-SIS scores were tested and found to follow a normal distribution. The total C-SIS score ranged from 0 to 24, with lower scores indicating more severe social isolation. In this survey, the highest score was 23, and the mean score of the entries was  $2.36 \pm 0.62$ . A score of 14 was set as the cut-off point for the C-SIS, with scores of  $\leq 14$  classified as indicating social isolation. There were 136 cases with scores below 14, leading to an incidence rate of social isolation of 51.3%. See **Table 2**.

**Table 2.** Status of gender-specific social isolation among the elderly (mean  $\pm$  standard deviation, points)

Variables	Number of items	Dimension scores	Average item scores
Connectedness	3	$6.05 \pm 2.38$	$2.02 \pm 0.79$
Sense of belonging	3	$8.10 \pm 1.85$	$2.70 \pm 0.62$
Overall score	6	$14.15 \pm 3.73$	$2.36 \pm 0.62$

### 3.3. Psychological resilience in older people

The 10-item Brief Psychological Resilience Scale was found to deviate from a normal distribution and was described using the median. The median (P50) total score for psychological resilience among community-dwelling older adults was 27 (total score range: 0–40). Males had a P50 score of 27, while females had a P50 score of 27.5, indicating that the overall level of psychological resilience was slightly above the median. See **Table 3**.

**Table 3.** Comparison of resilience scores among older adults by gender

Variables	P5	P50	P95	Minimum	Maximum
Male	12.5	27	38	2	40
Female	13.35	27.5	37	9	40
Total	14	27	37	2	40

### 3.4. Levels of psychological well-being in older people

Psychological well-being scores were also found to be non-normally distributed and were described using the median. The total scale score had a P50 of 161 (total score range: 33–231). The highest score was for the self-worth dimension (5.60 points), followed by the friendly relationships dimension (5.33 points). All other

dimensions scored  $\geq 4$  points (theoretical mean = 4 points), indicating that the psychological well-being of the elderly was at a slightly above-average level. See **Table 4**.

**Table 4.** Scores on the 6 dimensions of psychological well-being among older adults in the community

Variables	P5	P50	P95	Minimum	Maximum
Vitality of life	2.33	4.83	6	1.5	7
Health concerns	2.6	4.6	6	1.2	6.9
Self-worth	3.2	5.6	6.8	1.8	6.8
Friendly relations	2	5.33	7	1	7
Altruistic behavior	2.6	5.2	6.8	1	6.8
Personality growth	3.33	4.67	5.89	2	6.33

### 3.5. Study on the correlation between social isolation, psychological resilience, and psychological well-being among older people in the community

The six dimensions of psychological well-being were positively correlated with psychological resilience, with the life vitality and altruistic behavior dimensions having the strongest correlations (R-values of 0.611 and 0.549, respectively). Lower C-SIS scores indicated greater social isolation, thus psychological well-being was negatively correlated with the degree of social isolation. See **Table 5**.

**Table 5.** Correlation analysis of social isolation, psychological resilience, and psychological well-being among community-dwelling older adults

Variables	Total psychological resilience	Vitality of life	Health concerns	Self-worth	Friendly relations	Altruistic behavior	Personality growth
Total social isolation score	0.227**	0.165**	0.262**	0.371**	0.343**	0.340**	0.265**
Vitality of life	0.611**	1.000	0.637**	0.503**	0.395**	0.596**	0.461**
Health concerns	0.317**	0.637**	1.000	0.397**	0.334**	0.478**	0.523**
Self-worth	0.531**	0.503**	0.397**	1.000	0.541**	0.675**	0.584**
Friendly relations	0.364**	0.395**	0.334**	0.541**	1.000	0.605**	0.532**
Altruistic behavior	0.549**	0.596**	0.478**	0.675**	0.605**	1.000	0.650**
Personality growth	0.352**	0.461**	0.523**	0.584**	0.532**	0.650**	1.000

Note: \*\* Correlation is significant at the 0.01 level (two-tailed).

## 4. Discussion

### 4.1. Status of social isolation among older people in the community

The level of social participation among older people in China is low <sup>[6]</sup>, and the rise of digital technology in recent years has affected their daily social interactions. Impaired social interactions have led to increased social isolation. The social isolation of community-dwelling older adults in this study showed a moderately low level. Most of the older adults surveyed had face-to-face and heart-to-heart interactions with people they felt close to, which significantly reduced their social isolation. However, some older individuals still feel lonely due to a lack

of belonging. To improve the psychological well-being of older people in the community and achieve successful aging, it is essential to reduce social isolation among them.

#### **4.2. Psychological resilience of older people in the community**

In this study, the psychological resilience of community-dwelling older people of different genders was found to be moderately high. It has been confirmed that psychological resilience is one of the protective factors of mental health, and a high level of resilience helps to maintain psychological well-being<sup>[7]</sup>. Some studies have found that psychological resilience positively affects successful aging, and Jiang *et al.*<sup>[8]</sup> also show that psychological resilience is a protective factor for emotional health. Older people can further enhance their resilience by adopting an optimistic attitude toward negative events and actively mobilizing their social and psychological resources to cope with challenges, which helps them regulate the negative effects of adversity. This enables older adults to face setbacks or difficulties with stronger adaptability, making successful aging easier<sup>[9]</sup>.

#### **4.3. Level of psychological well-being among older people in the community**

The psychological well-being of the elderly in this study was found to be slightly above average, consistent with the findings from studies on community-dwelling elderly in Nanchang<sup>[10]</sup> and Baoding<sup>[11]</sup>. Among the dimensions, self-worth and friendly relationships scored the highest, indicating that the source of psychological well-being for the elderly comes not only from material fulfillment but also from the realization of self-worth.

#### **4.4. The relationship between social isolation, psychological resilience, and psychological well-being in older people in the community**

Lower C-SIS scores indicate greater social isolation, and thus psychological well-being was negatively correlated with social isolation. In this study, a C-SIS score of 14 was used as the cut-off, and a score of  $\leq 14$  indicated a state of social isolation. There were 136 cases with scores below 14, resulting in an incidence rate of social isolation of 51.3%. This shows that social isolation is prevalent among the elderly in the community, leading to feelings of loneliness and reduced psychological well-being. The World Health Organization has identified social isolation as an important social and policy issue in aging<sup>[12]</sup>. As China transitions into an aging society, older people require more attention from society. Increasing opportunities for social interaction among older individuals by organizing community group activities, expanding public activity spaces, and hosting lectures tailored to older adults can improve their social conditions, reduce social isolation, and enhance their psychological well-being.

The results of the study indicated that the six dimensions of psychological well-being were positively correlated with psychological resilience, with life vitality and altruistic behavior showing the strongest correlations (R-values of 0.611 and 0.549, respectively). A high level of psychological resilience helps the elderly maintain an optimistic outlook, face life's challenges positively, and achieve higher psychological well-being. Some studies have shown that the elderly can receive guidance and support from their families, such as psychological counseling and physical and emotional care. These positive family factors contribute to the physiological and psychological development of older adults, improving their ability to cope with stress<sup>[13]</sup>, stimulating positive emotions, and enabling them to face illness and stress with a more positive mindset. This, in turn, enhances the psychological resilience of the elderly<sup>[14]</sup>.

Successful aging is one of the important strategies for addressing population aging <sup>[15]</sup>. To achieve successful aging, society should pay more attention to the elderly in the community, understanding their challenges and needs. The findings of this study suggest that psychological resilience can be improved by helping older people overcome social isolation and enhance their psychological well-being.

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## Disclosure statement

The authors declare no conflict of interest.

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