Identifying and Compiling Psychological Resilience Factors and Comparing These Factors in the Two Regions of Kohmareh and Tasht-e Bakhtegan

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Article Info	ABSTRACT
	Objective: The present study aimed to identify and formulate the psychological resilience factors and to compare these factors between the two regions of Kohmareh and Tasht-e Bakhtegan. **Methods**: This study employed a mixed-methods design consisting of qualitative and quantitative phases. In the qualitative phase, data were collected through semi-structured interviews, and thematic analysis was used to extract resilience factors. In the quantitative phase, a researcher-developed questionnaire based on the qualitative findings was administered, and the collected data were analyzed using SPSS version 27. **Results**: The qualitative analysis identified 14 psychological resilience factors, including: adaptation to life, self-regulation skills, self-confidence, social support, compassionate support provision, designing and communicating hope-enhancing messages, creating opportunities for meaningful participation, clear and consistent boundary setting, teaching life skills, emotional and behavioral self-control, moderation of strong impulses, orderliness in life, mastery over inner desires and tendencies, and self-mastery in the face of adversity. Quantitative analysis revealed that the significance level of differences in psychological resilience factors between the two regions was less than 0.05, indicating a statistically significant difference between Kohmareh and Tasht-e Bakhtegan. **Conclusions**: The findings demonstrate that psychological resilience is a multidimensional construct influenced by contextual and regional factors. The significant differences observed between Kohmareh and Tasht-e Bakhtegan highlight the importance of region-specific interventions and policies aimed at strengthening psychological resilience based on local needs and capacities.

Introduction

Resilience, as a dynamic process, is the result of a complex interaction among genetic, environmental, social, and psychological factors. Key determinants of resilience include social support systems, coping skills, self-confidence, optimism, and problem-solving ability. Individuals with high levels of resilience typically hold a more positive outlook on life and demonstrate greater capacity for stress management and emotional regulation. Such individuals are able to identify new and creative solutions when faced with failures and setbacks (Hu et al., 2023).

The concept of resilience is also of particular importance in societies and organizations. Organizational resilience refers to an organization's ability to maintain performance and adapt to environmental, economic, and social changes. At the social level, resilience denotes the capacity of communities to recover and rebuild following natural or social disasters and crises. Strengthening resilience at both individual and collective levels not only contributes to improving quality of life but can also reduce the social and economic costs resulting from crises. Resilience is considered one of the most prominent variables in positive psychology and has received extensive scholarly attention (Eskandari et al., 2019).

Rutter (1990) defined resilience as individual differences in coping with and responding to difficult situations. In essence, resilience refers to individuals' ability to confront negative life events, remain psychologically healthy, and respond flexibly to life challenges. For most people, resilience implies achieving positive outcomes in the face of adversity; metaphorically, it can be understood as "bending without breaking," which signifies recovery after confronting hardship. It may also be conceptualized as coping with problems through problem-solving strategies at the time of occurrence.

Similarly, Kumpfer (1999) viewed resilience as a return to the original state of equilibrium or attainment of a higher level of functioning under threatening conditions, thereby facilitating successful adaptation in life. Positive life adaptation can be both an outcome of resilience and a precursor to higher levels of resilience. Resilient individuals demonstrate a high degree of personal adaptation to environmental stressors in their lives. Human competence and adaptation emerge from the interaction between ecological contexts and organismic development. Individuals at the lowest level of resilience show minimal capacity to adapt to new situations along the resilience continuum and recover slowly from stressful conditions. In contrast, resilient individuals exhibit

higher levels of mental health, broader self-regulation skills, greater self-confidence, stronger social support, and are less likely to engage in high-risk behaviors (Shamsaei Sardashti, 2018).

Tahmasebi Moghaddam et al. (2024) conducted a study titled "Analysis of Key Social Factors Affecting the Resilience of Zanjan City Against Natural and Environmental Hazards." Their findings indicated that, based on the Delphi method, 87 variables across 14 dimensions—namely health; socio-economic conditions; social cohesion and integration; social support; social networks; social knowledge and awareness; education and skills; community goals and effectiveness; information and communication; capability and access to essential services; social beliefs; culture and faith; crime and social security; community processes and programs; and social and institutional trust—were identified. Furthermore, MICMAC analysis revealed that among these 87 factors, 20 variables and two dimensions (social knowledge and awareness, and education and skills) obtained the highest scores in contributing to the social resilience of Zanjan City against natural and environmental hazards.

Silavi et al. (2022), in a study entitled "Identifying Factors Affecting Human Resource Resilience During the COVID-19 Crisis," identified 17 dimensions related to individual, organizational, and environmental factors influencing human resource resilience based on expert opinions, which formed the basis of a conceptual model. Subsequently, the measurement, structural, and overall models were validated using goodness-of-fit indices, and the hypotheses were confirmed as positive and statistically significant through path analysis. According to their results, the proposed model can be considered an appropriate framework for enabling employees to transform the threat of COVID-19 into an opportunity.

Hejazi et al. (2023), in their study "Examining Factors Affecting Social Resilience within the Framework of Good Urban Governance (Case Study: Shiraz Metropolis)," concluded that, based on the t-values, the influencing factors—namely justice, political stability, participation, vision, and planning—were statistically significant at the 95% confidence level. The authors emphasized that urban governance decision-makers, particularly in Shiraz with its distinctive political, social, cultural, and environmental characteristics, should encourage citizen participation and demand-driven engagement. They recommended that the involvement of civil society, academic institutions, and the private sector in dialogue, strategy formulation, and implementation plays a crucial role in achieving effective urban governance. A deep understanding of the concept of good

governance can provide valuable criteria to help governments and societies better comprehend the relationships among institutional structures that foster resilience. Urban good governance thus plays a central role in effectively addressing challenges and enhancing social resilience, which represents the capacity to absorb and cope with systemic disruptions arising from crises. Accordingly, future efforts should provide a structural analysis of the impacts of crises on social resilience within the framework of good urban governance in Shiraz to enhance urban social resilience capacity.

The study area of the present research includes two regions: Kohmareh and Tasht-e Bakhtegan. Kohmareh refers to three regions in Fars Province, extending from Shiraz to Kazerun and southward to Farashband and Firuzabad. The inhabitants of these regions belong to independent tribes of Fars Province, including Kohmareh-Sorkhi, Kohmareh-Noudan, and Kohmareh-Jaroogh, with Kohmareh-Sorkhi being the largest in terms of population and area. Overall, Kohmareh comprises more than 120 villages.

Abadeh-Tashk is a city in Fars Province and the administrative center of Bakhtegan County, located near the Tashk and Bakhtegan lakes. In 2019, Abadeh-Tashk became a county after being separated from Neyriz County. Comparing the resilience of these two regions is important because their populations experience distinct environmental, economic, social, and cultural conditions. Kohmareh and Tasht-e Bakhtegan differ significantly in geographical, climatic, economic, and cultural characteristics. Kohmareh is a mountainous and hard-to-access region located in the northeastern part of Neyriz County, characterized by a cold climate, limited welfare facilities, and low-income livelihoods based on traditional agriculture and livestock farming. In contrast, Tasht-e Bakhtegan is a fertile plain on the outskirts of Neyriz County with a more moderate climate, modern agriculture, small industries, and relatively greater access to welfare facilities.

Accordingly, the present study aims to examine and compare these two regions in order to identify the effects of these diverse factors on the level of psychological resilience among their residents.

Material and Methods

This study was conducted with an applied research orientation and employed a descriptive–analytical approach, implemented through survey methods and a mixed qualitative–quantitative design. The qualitative phase was carried out using a phenomenological approach, in which

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semi-structured interviews were utilized as the primary data collection tool. Semi-structured interviews provide flexibility and allow the researcher to explore emerging themes and lived experiences during the interview process. The statistical population of the study consisted of all residents of two geographical regions, Kohmareh and Tasht-e Bakhtegan, located in Fars Province, Iran. In the qualitative phase, purposive sampling combined with convenience access was employed. A total of 16 participants were interviewed, and the sampling process continued until theoretical saturation and data adequacy were achieved.

In the quantitative phase, the sample size was determined based on the Cochran formula for an unlimited population, resulting in a final sample of 384 respondents. Given that the optimal condition for conducting an independent samples t-test is having two groups of equal size, and considering that data were collected from two distinct geographical regions, cluster random sampling was identified as the most appropriate sampling method. Accordingly, each region was considered as a cluster, and data were randomly collected from individuals who voluntarily agreed to participate in the study.

Instruments

The qualitative instrument consisted of semi-structured interviews. In this phase, the researcher posed general, open-ended questions aligned with the overall research objectives to subject-matter experts and local informants. The verbal data obtained from the interviews were subsequently categorized into main and sub-themes.

The reliability and validity of the qualitative instrument were confirmed. To assess the reliability of the in-depth interviews, the member-checking (participant feedback) method was employed. In this procedure, the interview findings were returned to the same participants who had been interviewed previously, and they were asked to comment on the accuracy and credibility of the interpretations. A high level of agreement between participants' feedback and the interview results indicated acceptable reliability of the qualitative data.

The quantitative instrument was a researcher-developed questionnaire consisting of 14 items, which was designed based on the themes extracted from the qualitative phase. Responses were measured using a 5-point Likert scale (1 = very low, 2 = low, 3 = moderate, 4 = high, 5 = very high). Individual scores were calculated by summing the scores of all items and dividing the total by 14; thus, the final scale score ranged from 1 to 5.

The Cronbach's alpha coefficient for the questionnaire was 0.87, indicating high internal consistency. In addition, the split-half reliability coefficient was calculated as 0.81, further confirming the reliability of the instrument. To examine content validity, Lawshe's Content Validity Ratio (CVR) was applied. The results showed that the agreement index for none of the questionnaire items was below 0.70, confirming satisfactory content validity.

Data Analysis

Qualitative data analysis was conducted using open and axial coding techniques following transcription of the interviews. In the open coding stage, data were broken down into discrete concepts. Initially, the data were segmented based on differences, and then words or short phrases were grouped according to meaningful units to which conceptual labels (codes) were assigned. Subsequently, these codes were categorized based on phenomena directly related to the research questions.

In the next stage, more abstract categories were developed by relating the initial codes to broader conceptual categories. These categories were refined to clearly represent their content and facilitate conceptual clarity. The final stage involved axial coding, in which subcategories were systematically linked to core categories. This process entailed a complex combination of inductive and deductive reasoning, guided by focused questioning and constant comparison, with the aim of identifying relationships among categories within a paradigmatic framework.

The qualitative data analysis process can be summarized as follows:

1. Conducting interviews
2. Transcribing and editing interviews
3. Coding participants' statements
4. Categorizing codes into conceptually similar groups
5. Interpreting the emergent concepts
6. Integrating concepts and drawing conclusions

In the quantitative phase, data obtained from the psychological resilience questionnaire were analyzed using statistical tests including the independent samples t-test and Levene's test in SPSS software. These analyses were conducted to examine differences in the mean scores of psychological resilience factors between the two regions of Kohmareh and Tasht-e Bakhtegan.

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Results

Qualitative Findings

To address the main objective of the study, semi-structured interviews were conducted. During the interviews, experts responded to the research questions. After transcription, the data were analyzed line by line through conceptualization, categorization, and constant comparison. Based on similarities, conceptual relationships, and shared characteristics among open codes, concepts and categories (as clusters of related concepts) were identified.

In this study, the qualitative data were examined rigorously, and both main and sub-categories were extracted. Dimensions and attributes were identified and analyzed. Participants' responses were broken down into smaller meaning units, repeatedly compared, and grouped based on shared applications, leading to the emergence of relevant concepts. Table 1 presents the stages of identifying psychological resilience factors in the two regions of Kohmareh and Tasht-e Bakhtegan from the perspectives of qualitative participants.

Table 1. Stages of Identifying Psychological Resilience Factors in Kohmareh and Tasht-e Bakhtegan

No.	Initial Concepts (Extracted from Interviews)	Sub-Themes	Main Theme
1	Coping with unreasonable demands of neighbors; coping with inflexible opposing views; adapting to extreme heat and cold; adapting to life despite lack of welfare facilities	Adaptation to life	Psychological Resilience Factors in Kohmareh and Tasht-e Bakhtegan
2	Organizing thoughts; organizing behavior; monitoring and controlling behavior; planning for the future	Self-regulation skills	
3	Performing tasks correctly; having authority and behavioral structure; feeling competent	Self-confidence	
4	Positive collectivism; managing life affairs with others' help; participation in public ceremonies	Social support	
5	Friendship and affection toward community members; emotional support for family and neighbors; participation in charitable and solidarity events	Provision of compassionate support	
6	Active participation in friendship groups; fostering hope for solving social problems; organizing awareness classes for vulnerable groups (e.g., recovered addicts)	Designing and networking to enhance hope	
7	Establishing cooperatives; launching charitable loan programs; collective efforts to solve family problems	Creating opportunities for meaningful participation	

8	Fair distribution of responsibilities; defining access boundaries to social resources	Clear and adaptive boundary setting
9	Holding family education classes; promoting motivational and resilience-based media; teaching life skills in schools	Life skills education
10	Anger and negative emotion control; preventing inappropriate emotional expression; controlling negative needs; behavior regulation	Ability to control emotions, behaviors, and desires
11	Controlled assertiveness in decision-making; having firm decision frameworks; acceptable and controlled persistence in ideas	Strong willpower
12	Familiarity with the concept of order; systematic implementation of activities; regular execution of life plans	Orderliness in life
13	Avoidance of internal conflicts; aligning conflicting inner tendencies	Mastery over inner desires and impulses
14	Ability to understand difficult situations; ability to overcome intense emotions during hardship	Self-mastery in facing adversities

The 14 sub-themes extracted from Table 1 were used as the 14 items of the research questionnaire. These sub-themes were converted into questionnaire items using the following sentence format:

To what extent do you think (sub-theme) contributes to your resilience and resistance in solving life problems?

Quantitative Findings

Table 2. Demographic Characteristics of the Quantitative Sample

Variable	Category	Frequency	Percentage	Cumulative Percentage
Gender	Female	198	51.6	51.6
	Male	186	48.4	100
Age	Under 30 years	128	33.3	33.3
	30–40 years	220	57.3	90.6
	Over 40 years	36	9.4	100
Education	Associate degree or lower	26	6.8	6.8
	Bachelor's degree	311	81.0	87.8
	Master's degree	43	11.2	99.0
	PhD	4	1.0	100
Region	Kohmareh	192	50.0	50.0
	Tasht-e Bakhtegan	192	50.0	100

To provide a clearer understanding of the research variable, descriptive statistics including mean, standard deviation, and error indices were calculated.

Table 3. Descriptive Statistics of the Research Variable

Variable	Minimum	Maximum	Mean	Std. Deviation	Variance	Skewness	Kurtosis
Psychological Resilience Factors	2.12	4.92	3.894	0.428	0.184	−0.576	−0.925

As shown in Table 3, the mean score of psychological resilience factors is above the theoretical midpoint of the scale (3). In addition, skewness values fall within the acceptable range (−2 to +2), indicating that the data follow a normal distribution. To further examine data normality, the Kolmogorov–Smirnov test was applied. The test statistic for psychological resilience factors was 0.060 with a significance level of 0.092, confirming the normality of the data distribution.

To assess the importance of psychological resilience factors from the perspective of the quantitative sample, a one-sample t-test was conducted. A statistically significant difference between the observed mean and the theoretical mean (test value), along with a positive t-value, indicates that the identified factors are considered important by the statistical population.

Table 4 . One-Sample t-Test Results Comparing the Mean with the Theoretical Average

Variable	Test Value = 3	t	df	Sig.	Mean Difference	95% Confidence Interval
						Lower
Psychological Resilience Factors		40.929	383	0.001	0.894	0.851

The results in Table 4 show that the t-value for psychological resilience factors is statistically significant (p < 0.05), indicating that these factors are considered important in both Kohmareh and Tasht-e Bakhtegan.

To examine differences in psychological resilience factors between the two regions, an independent samples t-test was conducted.

Table 5. Independent Samples t-Test Results for Psychological Resilience Factors by Region

Assumption	Levene's Test F	Sig.	t	df	Sig.	Mean Difference	Std. Error	95% Confidence Interval
								Lower
Equal variances assumed	4.214	0.041	−3.795	382	0.001	−0.163	0.043	−0.248
Equal variances not assumed	—	—	−3.795	379.015	0.001	−0.163	0.043	−0.248

The results indicate that the significance level for psychological resilience factors between Kohmareh and Tasht-e Bakhtegan is below 0.05, demonstrating a statistically significant difference between the two regions.

Discussion

The findings of the present study revealed, first, that the 14 psychological resilience factors identified through expert interviews in the qualitative phase were perceived as significant in the quantitative sample. Second, the results demonstrated a statistically significant difference in psychological resilience factors between the Kohmareh and Tasht-e Bakhtegan regions. These findings are consistent with the results reported by Tahmasbi-Moghadam et al. (2024), Silvey et al. (2022), and Hejazi et al. (2023), all of which emphasize the contextual and multidimensional nature of psychological resilience in disadvantaged and vulnerable communities. In this section, the most important components of the psychological resilience model that emerged from the qualitative phase and were subsequently confirmed in the quantitative phase are discussed. To avoid unnecessary elaboration, factors that are relatively self-explanatory are not discussed in detail.

Adaptation to Life: Adaptation to life refers to individuals' ability to adjust to harsh and challenging living conditions in deprived and underserved regions. This capacity manifests through the cultivation of patience, perseverance, and self-reliance when confronting life stressors and structural limitations. Such adaptive capacity enables individuals to maintain functional stability despite persistent environmental pressures.

Self-Regulation Skills: Self-regulation skills reflect individuals' capacity to manage their thoughts, emotions, and behaviors in challenging situations. These skills facilitate emotional

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calmness, sustained attention, and effective decision-making under pressure, thereby playing a critical role in strengthening psychological resilience in adverse contexts.

Self-Confidence: Self-confidence denotes belief in one's own abilities to confront problems and overcome challenges. This belief functions as a motivational force that encourages persistence, effort, and proactive engagement in goal-directed behavior, ultimately contributing to improved quality of life and enhanced resilience.

Social Support: Social support refers to the presence of supportive relational networks through which individuals can rely on one another during times of hardship. Such networks play a fundamental role in reinforcing morale, motivation, and psychological resilience by buffering the negative effects of stress and adversity.

Creating Opportunities for Meaningful Participation: Providing opportunities for meaningful participation involves enabling individuals to engage in decision-making processes and activities that directly affect their lives. This participation strengthens feelings of belonging, responsibility, and self-efficacy, thereby contributing to the enhancement of psychological resilience at both individual and community levels.

Clear and Adaptive Boundary Setting: Clear and adaptive boundary setting refers to defining appropriate boundaries between personal and occupational life. This factor assists individuals in managing stress, maintaining psychological balance, and preventing burnout, particularly in environments characterized by chronic stress and limited resources.

At the conclusion of the discussion, it is important to emphasize that resilience is not a fixed trait that some individuals possess while others lack. Rather, resilience reflects a dynamic interaction between individuals and their environments. While resilience involves resistance to risk, it is a gradual and developmental phenomenon, and the accumulation of risk factors may overwhelm even the most resilient individuals. As noted by Rutter, resilience is an interactive, risk-related process with a developmental nature, originating from biological factors and early life experiences. Protective factors may operate through different mechanisms at various stages of development.

Awareness of resilience and its related concepts can substantially illuminate the complexity of psychological harm and its underlying causes. This perspective highlights the importance of understanding the relationship between past experiences and present outcomes and emphasizes attention to specific cases rather than solely to predicted consequences. Recognizing why some

individuals achieve significant success despite exposure to adverse conditions instills a sense of hope and challenges deterministic views of fate. This idea breathes optimism into discouraged individuals and rejects passive submission to circumstances (Ghamari & Mir, 2017).

To effectively confront hardships and life challenges, individuals require specific personal characteristics that can be developed through resilience. Bonanno (2014) describes these characteristics as follows:

Autonomy: Resilient individuals do not perceive themselves as victims of circumstances and attribute substantial value to themselves.

Humor: They tend to maintain cheerfulness and vitality in social interactions.

Innovation: They take active steps toward developing their interests and capabilities.

Insight: They perceive reality as it is and are unafraid to ask questions.

Creativity: They express and cultivate qualities that are uniquely their own.

Self-regulation and self-control: They are capable of managing emotions and impulses.

Positive self-concept: They generally perceive themselves as valuable and competent.

From an applied perspective, psychologists and counselors can utilize the 14 psychological resilience factors identified in this study to design educational and therapeutic programs aimed at enhancing resilience and promoting rational and adaptive coping in individuals' lives. Through such interventions, professionals can contribute effectively to the creation of vibrant, resilient, and well-functioning social environments. Furthermore, teachers and school administrators may design educational programs aligned with the factors identified in this research to foster lively, supportive, and psychologically healthy environments for students.

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