Resilience Indicators of the Tuva Residents Living in Rural and Urban Areas

Chochagai Mongush\textsuperscript{1,}\textsuperscript{a*}, Anna Frocol\textsuperscript{1,}\textsuperscript{b}, S Mombei-ool\textsuperscript{1,}\textsuperscript{c} and Choduraa Mongush\textsuperscript{1,}\textsuperscript{d}

\textsuperscript{1} Tuvan State University, 36 Lenina str., Kyzyl 667000 Russia

\textsuperscript{a*}chochagai_84@mail.ru, \textsuperscript{b}frokol@rambler.ru, \textsuperscript{c}mombeyool@mail.ru, \textsuperscript{d}choduraa_badmaa@mail.ru

*Corresponding author

Keywords: vitality, involvement, risk-taking, control

Abstract: The article presents the results of theoretical and empirical studies on the level of resilience of residents of the city of Kyzyl and regions of the Republic of Tyva. The results of processing the data obtained during a psychological and empirical study on a representative sample (373 people) using a technique to determine the level of vitality (S. Muddy) are described. The reliability of the established differences in the indicators of viability is checked using analytical mathematical statistics. The method of resilience developed by S. Muddy includes the following indicators: involvement, risk-taking, and control. According to the results of the study, significant differences among respondents living in the city of Kyzyl and in the regions of the republic were identified. The study finds a lower level of resilience in residents who live in rural areas. Respondents living in the city have a higher level of resilience in all respects.

1. Introduction

The psychological stability of people to complex situations of an external nature directly depends on the internal balance and calm of a person. It is especially interesting to trace this dependence on the example of the region we are studying. When studying factors affecting resilience, it is necessary to take into account the objective social conditions of the region. Features of socio-economic development also directly affect the resilience of the population. In February 2019, Deputy Chairmanship of the Government of Russia T.A. Golikova stated, “In the Republic of Tuva, ... poverty accounted for 41.5% of the population in 2017. An unprecedented level, this is the so-called child poverty, because the number of children is about 35% in the population structure” [1]. She called for vigorous action by the ministry and department. In addition, Tuva ranks 9th out of 85 regions in terms of budget subsidies (In 2019, the Republic of Tuva received 16.9 billion RUB). And as we know, the level of subsidization is an indicator of the development and self-sufficiency of the region. Also, for several years, the studied region ranks last among other regions in terms of the quality of life of the population. Tuva scored 16 rating points. For comparison, we can give the level of quality of life in Moscow (it scored 77 points).

The introduction to science of the concept of resilience is associated with the name of S. Muddy, who introduced the term hardiness, meaning “strength,” “endurance.” D. A. Leontyev proposed to designate this personality trait as vitality and presented it as a system of beliefs about oneself, about the world, about relations with the world. He wrote that resilience includes three components: involvement, control, risk-taking. The severity of these components and vitality as a whole prevents the occurrence of internal tension in stressful situations due to persistent coping with stress and perceiving them as insignificant.

Considering the manifestations of human resilience, we can note that, activating his abilities, a person chooses his own “lifeworld” (E. Husserl) [1]. V. Frankl, who passed one of the most brutal concentration camps of the Second World War, noted that in inhuman conditions, for human vitality, universal meanings were important. During World War II, inhuman cruelty was enough, but the people who fought for the homeland and defended it built the country again after the war. They were able to defend the world, because they knew what they were fighting for and why they could survive and stay mentally healthy.
An analysis of the scientific literature allows us to conclude that there are many works related to vitality. So Nalivaiko, T. V. disclosed the issue of the vitality of a person in connection with personality traits [2]. In turn, Odintsova M.A. considered resilience from the perspective of stress psychology, victimization-resilience [3]. In her opinion, there are two types of overcoming problem situations: resilient and victim. Despite the differences, the presented works are of undoubted interest, first of all, in understanding the issue of resilience and in terms of the methods used. Kalinina, N. V., considered resilience as a resource for overcoming difficult life situations [5]. Questions of resilience and psychological helplessness of women are reflected in the works of Kalinina, S. B. [6].

As noted above, quite a lot of research is devoted to the viability of various categories of the population. So, Petrosyants, V. R. proves the relationship between school bullying and the resilience of high school students [7]. In turn, Hammad, S. M. considered vitality as the basis for self-realization of a person in difficult life situations using the example of Palestinian refugees [8].

It should be noted that with the apparent multidimensionality and vastness of research, many more properties and mechanisms of resilience require additional consideration and research. Thus, the study of the viability of different categories of citizens is highly relevant.

2. Materials and Methods

Sample. The study involved three hundred three respondents, who are residents of the Republic of Tyva, living in urban and rural areas, whose average age is 50 years. The sample of rural residents included residents living in the Todzhinsky, Erzinsky, Tandinsky, Kyzyl, Kaa-Khem, and Mongun-Taiginsky districts of the republic. Three hundred three respondents made up a group of residents from rural areas. The group of urban residents included residents of Kyzyl, in the amount of 70 people.

Methodology. To identify the level of viability, S. Muddy's viability test (modified by D. A. Leontyev) is used, which measures the scale of involvement, control, and risk acceptance. For statistical data processing, a Microsoft Excel program with a data analysis function (descriptive statistics, Student's t-test) was used.

Procedure. The study consisted of a diagnostic procedure in which respondents were offered the method of S. Muddy, aimed at determining the level of viability of respondents.

3. Results

The results obtained (Table 1) show statistically significant differences; the residents of Kyzyl have a higher involvement than rural residents (t = 1.302; p = 0.2). A greater number of urban residents have high results of involvement in life (rural 20%, urban 27%). Rural residents have lower resilience compared to urban residents (60%, 44%). On average, urban residents also have an upward trend (20% of rural to 29% of urban residents).

The “risk acceptance” indicators for both samples have approximately equal proportions; for example, 26% of rural and 29% of urban residents showed high "risk acceptance" indicators. There are no statistically significant differences on this scale. According to the “Control” scale, urban residents show better results (49%) compared with rural residents (43%), but all this remains at the level of trends.

The results on the “General viability” scale show statistical significance according to the Student's test. So, urban residents show higher rates compared to rural residents (t = 2.896; p = 0.5). Low rates are more common among rural residents (48%), compared with urban residents (37%).

Thus, the results show the following picture:

1. Urban residents have greater emotional involvement in life compared with urban residents;
2. At the level of general trends, there are differences in the "control" scale; urban residents feel more control over their lives;
3. In terms of overall resilience, urban residents show greater resilience compared to rural residents.
**Fig. 1.** Comparison of average resilience indicators of rural and urban residents (Republic of Tuva).

**TABLE 1. COMPARISON OF LIFE-RESISTANCE INDICATORS OF CITY AND RURAL TUVANS (STUDENT’S T-TEST)**

| Indicators of resilience | Kyzyl city | Tuva areas | Student’s t-test | Relevance |
|--------------------------|------------|------------|------------------|-----------|
|                          | Average    | Standard deviation | Average    | Standard deviation |        |        |
| Involvement              | 35.443     | 1.302      | 10.892          | 32.288      | 0.506  | 8.791  | 2.580  | p=0.02 |
| Control                  | 30.5       | 1.169      | 9.783           | 28.530      | 0.453  | 7.869  | 1.798  | -       |
| Risk-taking/risk acceptance | 16.386     | 0.713      | 5.967           | 15.262      | 0.257  | 4.469  | 1.771  | -       |
| Overall resilience       | 82.329     | 2.896      | 24.231          | 76.013      | 1.031  | 17.917 | 2.473  | p=0.05 |

**4. Discussion**

The calculations performed according to the method of "Viability Test" show that the sample is characterized by an average level on the following scales:

- **“Resilience”** (M = 77.20 points). Most respondents have grades ranging from 42 to 127 points, indicating a wide variation between low and high grades. This allows us to speak of a pronounced optimistic attitude towards the life situation, readiness to overcome obstacles, as well as the presence in this sample of a passive attitude to the life situation, the prevalence of a pessimistic position, and disbelief in the possibility of successfully overcoming obstacles;

- **“Involvement”** (M = 32.88 points). Most subjects have scores ranging from 8 to 52, which shows a large spread between low, medium, and high values on these scales, which characterizes the degree of involvement. On average, the sample is characterized by a developed component of engagement and enjoys its own activities;

- **“Control”** (M = 28.90 points). Most of the respondents have grades ranging from 9 to 61 points, which indicates the prevalence of a developed sense of control among subjects; this allows one to feel that they choose their own activity. On average, respondents are convinced that fighting can influence the outcome of what is happening, even if success is not guaranteed;

- **“Risk-taking/risk acceptance”** (M = 15.47 points). The subjects have scores in the range from 5 to 38, which demonstrates the belief that everything that happens to them contributes to their development through knowledge derived from experience, it does not matter, positive or negative. A person who considers life as a way of gaining experience is ready to act in the absence of reliable guarantees of success at their own peril and risk, believing that the desire for simple comfort and safety impoverishes the life of an individual.

As a result of comparing the vitality of the first (urban residents) and the second (urban residents) groups of subjects, the following significant difference was found: the vitality in the first group was significantly higher than in the second (p = 0.005). This suggests that the first group (M = 82.328) is characterized by the severity of resilience in general and its components. This prevents the emergence of internal stress in stressful
situations due to persistent coping with stress and perceiving them as less significant. While in the second group, the level of vitality is lower (M = 76.026).

As a result of comparing the involvement of groups 1 and 2 of the subjects, significant results were found. Namely, participation in the first group was significantly higher than in the second (p = 0.002). The data suggest that the first group (M = 35.443) is characterized by a high level of involvement, which indicates a person’s conviction that everything that happens to him is interesting and conducive to development. A person who considers life as a way to gain experience is ready to act and enjoy life. While in the second group, the level of involvement is lower (M = 32.288).

5. Conclusion

So, in general, in all indicators of resilience, the residents of the city of Kyzyl demonstrate a higher level than the residents of the regions of the republic. Perhaps such results can be explained by the extremely high level of village-city migration. Migration from districts to the capital of the republic is caused by unemployment, the inability to receive qualified medical care, to give a decent education to children, etc. As a consequence of this, the following arises:

- Conditions for fierce labor competition are created;
- Domestic difficulties arise (purchase and rental of housing, placement of children in educational institutions).

Only those residents who work in the public sector (education and medicine), who receive various benefits (unemployment, disability, childcare) and livestock, remain in the villages.

Thus, people with a sufficient level of vitality are fixed in the urban environment.

6. Acknowledgments

This work was financially supported by the Russian Foundation for Basic Research No. 19-013-00229 A.

References

[1] Official site Russian Government News. (2019). Tatyana Golikova at the discussion of the Russian Investment Forum talked about measures to reduce poverty. Retrieved from http://government.ru/news/35734/.
[2] Fominova, A. N. (2012). The vitality of the individual. Moscow, Russia: Moscow State Pedagogical University.
[3] Nalivaiko, T. V. (2010). Viability and its connection with personality traits. Chelyabinsk, Russia: Publishing Center SUSU.
[4] Odintsova, M. A. (2015). The psychology of resilience. Moscow, Russia: FLINTA: Nauka.
[5] Kalinina, N. V. (2012). Resilience as a resource for overcoming difficult life situations. Ulyanovsk, Russia: UIPKPRO.
[6] Kalinina, S. B. (2011). Psychological helplessness and the development of women's resilience. Tver, Russia: Tver State University.
[7] Petrosyants, V. R. (2011). The psychological characteristics of high school students, bullying participants in the educational environment, and their viability (Abstract of Diss. of Cand. of Psychological Sci.). Saint-Petersburg, Russia.
[8] Hammad Suad Muhammad. (2006). Resilience as a basis for personal self-realization in difficult life situations: The case of Palestinian refugees (Abstract of Diss. of Cand. of Psychological Sci.). Moscow, Russia.