journal homepage: http://kont.zsf.jcu.cz
DOI: 10.32725/kont.2025.008

KONTAKT / Journal of nursing and social sciences related to health and illness

Original research article

Examining the variances in well-being among LGBTQ+ older adults across diverse living environments in Slovenia

Mihael Nedeljko [1], Barbara Toplak Perović [1], Jason D. Flatt [2], Boris Miha Kaučič [1,3] *

[1] *Alma Mater Europaea University, Research Institute of Social Gerontology, Maribor, Slovenia*
[2] *University of Nevada, Las Vegas, School of Public Health, Las Vegas, NV, USA*
[3] *Institute for Training, Work and Care dr. Marijan Borštnar Dornava, Slovenia*

Abstract
Background: Lesbian, gay, bisexual, transgender, and queer (LGBTQ+) older adults experience long-term minority stress due to societal norms that lead to discrimination and stigma. The purpose of the research was to compare the differences in subjective psychological well-being among LGBTQ+ older adults according to their living environment.
Methods: A purposive sample comprising 318 LGBTQ+ older adults was recruited for the quantitative survey. In the initial stage, exploratory factor analysis (EFA) was conducted. To examine the aim of the study, a one-way analysis of variance (ANOVA) was employed, followed by a *post hoc* analysis to identify any variations in the perception of well-being based on the living environment.
Results: Significant differences in well-being among LGBTQ+ older adults across living environments were observed for three items ($p < 0.05$): WB1 – … I feel cheerful and in good spirits, WB2 – … I feel calm and relaxed and WB4 – … I wake up feeling fresh and rested. With *post hoc* analysis, we showed statistically significant differences in the perception of subjective psychological well-being according to the three living environments.
Conclusion: Our findings indicate significant variations in subjective psychological well-being among LGBTQ+ older adults across different residential settings in Slovenia. While these findings may not generalise to other settings, further research using larger samples and in other EU countries should explore the role of living environments on LGBTQ+ older adults' subjective psychological well-being.

Keywords: LGBTQ+ older adults; Living environment; Rural areas; Urban areas; Well-being

Introduction

LGBTQ+ older adults encompass individuals aged 50 and over who identify as lesbian, gay, bisexual, transgender, or queer (Bain and Podmore, 2021). They represent a vulnerable subgroup of the ageing population (Emlet, 2016) who are approximately twice as likely to contemplate suicide and one and a half times more likely to experience anxiety or depression (King et al., 2008), which can be reflected in their poorer well-being (Sweileh, 2022). As pointed out by Harley et al. (2016), social isolation and loneliness negatively impact health, cause faster functional decline, and influence earlier mortality in LGBTQ+ older adults; therefore, it also affects their emotional well-being (Sweileh, 2022).

There is not much research examining well-being among LGBTQ+ older adults, and most of this research is limited to the US space and portrays this population as hidden and invisible (Wright and Canetto, 2009). The reality is that populations marginalised by gender identity and/or sexual orientation have largely been excluded from research and health promotion (Mulé et al., 2009). Well-being is a complex concept that encompasses various health-related, social, and psychological factors (Delle Fave et al., 2018). As explained by Camfield and Skevington (2008), the concepts of subjective well-being and subjective quality of life are synonymous, and satisfaction with life is a subordinate component of these two concepts. The concept of well-being lacks a singular, universally accepted definition, and its use often overlaps with related terms such as happiness, life satisfaction, and quality of life (Dodge et al., 2012). Well-being is therefore about a positive emotional reaction that serves as a contrast to harmful influences in the domain of pleasure and represents a positive psychological aspect in response to physical stressors in the field of health (Rohde et al., 2019). This can also be influenced by using computerised cognitive training (CCT), which affects the improvement of well-being (Žepič Milič, 2021). The LGBTQ+ population experiences a degree of psychological distress due to marginalisation, but there are also means by which these pressures can be reduced, such as community involvement, which can improve their well-being (Roberts and Christens, 2021). The most common explanation for existing disparities in mental health in the LGBTQ+ population is the influence of minority stress (Carvalho and Guiomar, 2022; Mongelli

* **Corresponding author:** Boris Miha Kaučič, Institute for Training, Work and Care dr. Marijan Borštnar Dornava, Slovenia;
e-mail: miha.kaucic@zavod-dornava.si
http://doi.org/10.32725/kont.2025.008
Submitted: 2024-07-19 • Accepted: 2025-02-07 • Prepublished online: 2025-02-11
KONTAKT 27/1: 68–73 • EISSN 1804-7122 • ISSN 1212-4117

et al., 2019). Minority stress theory posits that the elevated prevalence of mental health issues among LGBTQ+ individuals is linked to the stigmatisation of their identities (Mark et al., 2019), which is reflected in their well-being (Sweileh, 2022). A particularly powerful form of minority stress is structural stigma (Pachankis and Bränström, 2018), which limits opportunities and resources on a social level, through cultural norms and politics, thus affecting the well-being and health of the stigmatised population (Hatzenbuehler, 2016).

The study focuses on the LGBTQ+ population of older adults living in Slovenia, where 2,116,972 people lived at the end of 2023 (Republic of Slovenia – Statistical Office, 2024). In contrast to urban centres found in other EU member states or globally, Slovenian cities tend to be characterised by their smaller to medium-sized scale. Among the 6,035 settlements in Slovenia, approximately 90% consist of fewer than 500 inhabitants, with just two settlements exceeding 50,000 people. This pattern is evident in the classification of cities within Slovenia and the European Union (Ministrstvo za naravne vire in prostor, 2024). Ljubljana and Maribor are the largest cities in Slovenia and the only ones with more than 50,000 inhabitants. The condition that a municipality must fulfil to acquire the status of a city municipality is that its territory has a city with a population of at least 20,000, employs at least 15,000 people, and serves as the economic, cultural, and administrative hub of its region (Ministrstvo za naravne vire in prostor, 2024). In Slovenia, we have ten cities that meet this condition in addition to the two largest cities. We define these cities as small cities. We classify all other settlements as rural areas, as the US Census Bureau also includes regions in rural areas outside of urban or clustered settlements (Krout and Hash, 2015). Here, we are aware that there are no precise definitions of rural and urban living environments (Gross-Manos and Shimoni, 2020), and such living environments differ in population density, number of inhabitants, economic factors, etc. (Werth et al., 2010).

Research indicates that LGBTQ+ older adults and their cisgender counterparts exhibit significant disparities in perceived well-being (Grabovac et al., 2019). However, we find no studies that identify differences in the well-being of LGBTQ+ older adults according to their living environment. As highlighted by Lee and Quam (2013), the aging experiences of LGBTQ+ individuals are shaped by their residential context, with rural and urban settings presenting different social, cultural, and economic challenges. The goal of the presented study was to compare the differences in the perception of well-being among LGBTQ+ older adults according to their living environment, which we divided into three groups: large cities, small cities, and rural areas. Based on the literature review and the established research objective, this study aims to investigate the relationship between living environment and well-being among LGBTQ+ older adults. Specifically, this study will examine whether there exist statistically significant differences in well-being among LGBTQ+ older adults based on their living environment.

Materials and methods

Study population

We employed a purposive sampling technique to recruit a sample of 318 LGBTQ+ older adults (aged 50+) from the general population. As Brečko (2005) notes, LGBTQ+ older adults often constitute a hidden population due to their small size, difficulty in accessing them, and desire for anonymity. Because the members of a hidden population usually know each other, we used the snowball method or sampling through social networks. Computer-assisted interviewing is increasingly used in surveys involving sensitive topics and is carried out in two ways: in person via a computer (CAPI – computer-assisted personal interviewing) or independently via a computer (CASI – computer-assisted self-interviewing) (Brečko, 2005). Data was collected using an online survey administered through the 1KA platform (version 2002–2023). While computer-based surveys can enhance respondent privacy and perceptions of survey importance, some participants, particularly those with limited computer experience, may experience discomfort. However, the use of computers does not inherently compromise data credibility or accuracy (Brečko, 2005).

We included 318 sample units in the sample. One respondent represents one unit. Males predominated with 87.4%. Only 12.6% of participants in the research are women. In terms of age, the respondents were classified into five categories. 50.9% were aged 50 to 55, 23.9% were aged 56 to 60, 13.5% belonged to the age group of 61 to 65, while 8.6% belonged to the age group of 66 to 70 years. The fewest respondents (3.1%) were aged 71 or older.

In terms of sexual orientation, gays predominate (50.3%), followed by bisexuals (34.9%), and lesbians (10.4%). 1.6% were heterosexually oriented, 0.6% were pansexually oriented, and 0.3% were asexually oriented. In addition, 1.9% of the respondents defined themselves as having a different sexual orientation.

Regarding gender identity, the majority identified as male (81.1%), followed by female (12.6%). Additionally, 1.6% identified as transgender women and 0.6% as transgender men. The same percentage (0.6%) identified as non-binary and queer. Moreover, 1.9% identified as multisexual, and one person (0.3%) identified as asexual. The remaining 0.6% described themselves as something else.

The place of residence of the respondents is also an important piece of information. 45% of the persons interviewed lived in a large city, and 28.6% of the persons interviewed lived in a small town. 26.4% of the respondents lived in rural areas.

Measures

The instrument for measuring the experience of well-being was the standardised and validated WHO scale (PET) well-being indicator (version 1998) (WHO 1998). The scale consists of five items. The construct of experiencing well-being was measured using a 6-point Likert scale of agreement, in which 1 means “never”; 2 “rarely”; 3 “occasionally”; 4 “sometimes”; 5 “usually”; and 6 “every time”. Place of residence was measured on an ordinal scale, in which respondents could choose between three possible answers: big city, small city, and rural area.

Data analysis

Data were analysed using IBM SPSS Statistics 25. Descriptive, univariate, and multivariate statistical methods were employed. To reduce the number of variables into a smaller set of factors, exploratory factor analysis (EFA) with principal components extraction was conducted (Reio and Shuck, 2015). Cronbach’s alpha was calculated to assess factor reliability (Leontitsis and Pagge, 2007). Normality of data distribution was confirmed through Kolmogorov–Smirnov and Shapiro–Wilk tests. Results from the Kolmogorov–Smirnov and Shapiro–Wilk tests indicated that the data was normally distributed ($p > 0.05$). One-way ANOVA with *post hoc* comparisons was used to examine well-being differences across the three living environment groups.

Ethical aspect of research

The Ethics Commission at Alma Mater Europaea University issued a resolution (no. 15/2022-23) approving the research methodology and instrumentation as ethically sound.

Results

EFA was conducted to assess the underlying factor structure of the data and to determine whether the items could be grouped into meaningful constructs.

We measured the construct of experiencing well-being with five items, which should comprise one factor according to the theoretical operationalisation. K-M-O (0.864) shows us that the sample is suitable for factor analysis, and Bartlett's test of sphericity was also significant (p = 0.001), as can be seen in Table 1. A single factor explaining 72.4% of the variance was extracted from the five items. This exceeded the 60% threshold for a satisfactory factor solution. Communalities for all items surpassed the 0.40 criterion, indicating adequate factor loadings. The factor was reliably measured, as indicated by a Cronbach's alpha of 0.90.

Table 1. Factor analysis of perceived well-being and Cronbach's alpha value of LGBTQ+ older adults

Item code	Over the last two weeks…	Cronbach α	Communalities	FL
WB1	… I feel cheerful and in good spirits	0.90	0.789	0.909
WB2	… I feel calm and relaxed		0.826	0.897
WB3	… I feel active and vigorous		0.805	0.889
WB4	… I wake up feeling fresh and rested		0.660	0.813
WB5	… my daily life is filled with things that interest me		0.540	0.735
K-M-O: 0.864; Bartlett's test of sphericity: 1078,771; sig.: 0.001				

Note: FL – factor loadings

Descriptive statistics, including means and standard deviations, were calculated for each well-being item by living environment. To address the study aim, a one-way analysis of variance (ANOVA) was conducted. The analysis revealed statistically significant differences (p < 0.05) in three of the five well-being items (WB1, WB2, and WB4), indicating variations in well-being across the three groups. (Table 2). There are no statistically significant differences in items WB3 and WB5.

Table 2 shows average values, standard deviations, F-distributions, and significance of individual items. The results show a fairly high level of well-being of LGBTQ+ older adults, especially in rural areas (average value: 3.71–4.30) and large cities (average value: 3.98–4.40) measured on a Likert scale ranging from 1 to 7.

Table 2. Statistically significant differences in ratings of well-being according to the living environment and descriptive statistics

Item code	Over the last two weeks…	Big city (>50.000)		Small city (<50.000)		Rural areas		F	p
		$\bar{x}$	σ	$\bar{x}$	σ	$\bar{x}$	σ		
WB1	… I feel cheerful and in good spirits	4.40	1.001	4.04	1.182	4.30	1.106	3.016	**0.049**
WB2	… I feel calm and relaxed	4.25	1.038	3.81	1.246	4.25	1.118	4.948	**0.008**
WB3	… I feel active and vigorous	3.98	1.084	3.69	1.253	4.11	1.222	2.958	0.053
WB4	… I wake up feeling fresh and rested	3.92	1.166	3.40	1.482	3.71	1.198	4.653	**0.010**
WB5	… my daily life is filled with things that interest me	4.24	1.170	3.90	1.399	4.21	1.054	2.460	0.087

Note: $\bar{x}$ – mean; σ – standard deviation; p – significance; F – F distribution

As indicated in Table 3, individuals residing in large cities reported significantly different well-being levels on item WB1 compared to those living in small cities (p = 0.040). Respondents living in large cities and small towns do not statistically differ from respondents living in rural areas (p < 0.005).

For item WB2, statistically significant differences were observed between residents of large cities and small towns (p = 0.011), and between residents of small towns and rural areas (p = 0.028). However, no significant difference was detected in item WB2 scores between residents of large cities and rural areas (p > 0.05).

Regarding item WB4, significant differences in well-being were observed between residents of large cities and small towns (p = 0.007). However, no significant differences emerged in well-being between residents of large cities or small towns compared to those in rural areas (p > 0.05).

No statistically significant differences in well-being perceptions were found for items WB3 and WB5 across living environments.

Table 3. Tukey's test to examine significant differences between respondents' attitudes regarding well-being in relation to their living environment

Item code	Over the last two weeks...	Living environment	Living environment	Mean difference (I–J)	σ	*p*
WB1	... I feel cheerful and in good spirits	Big city (>50,000)	Small city (<50,000)	0.355	0.145	**0.040**
		Big city (>50,000)	Rural areas	0.101	0.149	0.776
		Small city (< 50,000)	Rural areas	–0.254	0.164	0.270
WB 2	... I feel calm and relaxed	Big city (>50,000)	Small city (<50,000)	0.439	0.150	**0.011**
		Big city (>50,000)	Rural areas	0.002	0.154	0.999
		Small city (< 50,000)	Rural areas	–0.437	0.170	**0.028**
WB 3	... I feel active and vigorous	Big city (>50,000)	Small city (<50,000)	0.287	0.157	0.163
		Big city (>50,000)	Rural areas	–0.128	0.161	0.706
		Small city (< 50,000)	Rural areas	–0.415	0.177	0.052
WB 4	... I wake up feeling fresh and rested	Big city (>50,000)	Small city (<50,000)	0.520	0.171	**0.007**
		Big city (>50,000)	Rural areas	0.202	0.175	0.482
		Small city (< 50,000)	Rural areas	–0.319	0.193	0.224
WB 5	... my daily life is filled with things that interest me	Big city (>50,000)	Small city (<50,000)	0.344	0.163	0.089
		Big city (>50,000)	Rural areas	0.030	0.167	0.982
		Small city (< 50,000)	Rural areas	–0.313	0.183	0.204

Note: σ – standard deviation; *p* – significance

Discussion

In the presented research, we determined whether there are differences in the experience of well-being among LGBTQ+ older adults according to different living environments, due to the limited exploration of sexual orientation in geographical health research (Parr, 2004), while research on the ageing of LGBTQ+ people refers mainly to urban environments, where the concentration of LGBTQ+ people is higher (Grossman, 2007). We note that the authors have already researched differences in mental health in the LGBTQ+ population living in urban and rural environments (Wienke and Hill, 2013), with no attention given to LGBTQ+ older adults and specifically to disparities in well-being, although mental health is often equated with well-being in the scientific literature (Krefis et al., 2018). In the research, we find that there are statistically significant differences in the well-being of LGBTQ+ older adults according to the living environment. Poon and Saewyc (2009) find that young LGBTQ+ people in rural areas consume more illicit substances, drink alcohol excessively, are socially isolated, and have suicidal thoughts more often compared to their peers in urban areas. We found no similar research on LGBTQ+ older adults. Wienke and Hill (2013) further note that living in the biggest cities has a negative impact on the well-being of homosexuals and they feel relatively worse as a result. Smith et al. (2018) also note that transgender people in rural areas are subject to discrimination at all levels, which is reflected in their poor well-being. Requena (2016) explains that in rural areas of richer countries the standard is high enough for residents to feel good. In contrast, less developed countries typically exhibit a disparity in resources between rural and urban areas, with the latter offering more favourable conditions for well-being. Numerous studies have indicated that LGBTQ+ older adults who engage in activities at LGBT-specific facilities experience enhanced levels of overall well-being (Brennan-Ing et al., 2014; Sullivan and Asselin, 2013). Services aimed at the LGBTQ+ population are mainly centralised in urban areas (Lee and Quam, 2013), where about half of the world's population lives today, and where 70 percent of the population will live by 2050 (United Nations, 2004).

In this research, we identify statistically significant differences in the experience of well-being among LGBTQ+ older adults living in large and small cities, as shown by statis-

tically significant differences in items WB1 – *... I feel cheerful and in good spirits*, WB2 – *... I feel calm and relaxed*, and WB4 – *... I wake up feeling fresh and rested*. The average values show that respondents in big cities feel better compared to those who live in small cities. These findings can be explained by the fact that urban areas show greater support for the LGBTQ+ community (Thompson, 2022). In Slovenia, there is a pronounced centralisation of services for LGBTQ+ individuals in the capital, thus such a result is anticipated. Similarly, Nedeljko et al. (2024a) report that life satisfaction correlates positively with the size of the place of residence. LGBTQ+ individuals in urban areas generally have greater access to LGBTQ-specific resources, community support, and healthcare services compared to their rural counterparts (Willging et al., 2006), contributing to a sense of security and well-being. This increased access can lead to improved mental and physical health outcomes (Nedeljko et al., 2024b). For item WB2 – *... I feel calm and relaxed*, we also find that there is a statistically significant difference between those who live in small towns and those who live in rural areas, whereby LGBTQ+ older adults in rural areas feel calmer and more relaxed. Our results corroborate the findings of Oswald and Culton (2003) who found that rural life is better for LGBTQ+ individuals because of close interpersonal relationships, high quality of life, and greater involvement in social networks, as the quality and extent of social relationships affect well-being and quality of life in older adults (Berg-Warman and Brodsky, 2006).

Limitations of the research

The study's main limitation is the concept of well-being (WHO, 1998). Challenges were encountered in securing a sufficient number of LGBTQ+ participants for the research due to the stigma and taboo surrounding different sexual orientations, gender identities, and gender expressions. The lack of familiarity with this population and the absence of data on the LGBTQ+ population in relation to the entire population posed difficulties in planning a sample that could provide reliable conclusions about the entire population (Brečko, 2005). Additionally, the snowball sampling method may overlook individuals with limited social networks or tightly closed social circles. The research also demonstrated limitations regarding the accessibility of certain gender identities within the LGBTQ+ acronym, as no transgender men were included in the sample. Another limitation of the study is the disproportionate gender distribution, with 87.4% of the respondents being male. Lastly, the research's inclusion criterion of self-identification as part of the LGBTQ+ community may have discouraged some individuals, particularly those in rural areas, from participating due to stigma, potentially resulting in incomplete survey responses.

Conclusion

Our analysis revealed statistically significant variations in well-being among LGBTQ+ older adults living in large cities, small towns, and rural areas in Slovenia. We cannot generalise that LGBTQ+ older adults feel better in urban or rural environments. In the case of Slovenia, it is undoubtedly clear that the centralisation of services for LGBTQ+ people in the capital certainly contributes to better well-being of LGBTQ+ older adults in a large city, which is reflected by the obtained LGBTQ+ friendly certificate, which helps to raise awareness and ensure equal conditions for all citizens. It is probable that other variables influence well-being as well, such as social integration, tolerance, and acceptance of the LGBTQ+ community, religious and political influences, and more. This is the primary research on well-being in Slovenia on the population of LGBTQ+ older adults. Thus it would be necessary to repeat the research on an even larger sample in the future to be able to compare the obtained results with those of other countries. Similar research would be welcome in other European countries, which are culturally, religiously, and politically comparable to Slovenia and differ in tolerance towards sexual minorities.

Ethical aspects and conflict of interest

The authors have no conflict of interest to declare.

References

1. Bain AL, Podmore JA (2021). Placing LGBTQ+ urban activisms. Urban Stud 58(7): 1305–1326. DOI: 10.1177/0042098020986048.
2. Berg-Warman A, Brodsky J (2006). The supportive community: a new concept for enhancing the quality of life of elderly living in the community. J Aging Soc Policy 18(2): 69–83. DOI: 10.1300/J031v18n02_05.
3. Brečko BN (2005). Istospolno usmerjeni: metodologija raziskovanja skritih populacij. Družboslovne razprave 21(49–50): 107–118.
4. Brennan-Ing M, Seidel L, Larson B, Karpiak SE (2014). Social care networks and older LGBT adults: Challenges for the future. J Homosex 61(1): 21–52. DOI: 10.4324/9781315718804.
5. Camfield L, Skevington SM (2008). On subjective well-being and quality of life. J Health Psychol 13(6): 764–775. DOI: 10.1177/1359105308093860.
6. Carvalho SA, Guiomar R (2022). Self-Compassion and Mental Health in Sexual and Gender Minority People: A Systematic Review and Meta-Analysis. LGBT Health 9(5): 287–302. DOI: 10.1089/lgbt.2021.0434.
7. Delle Fave A, Bassi M, Boccaletti ES, Roncaglione C, Bernardelli G, Mari D (2018). Promoting well-being in old age: The psychological benefits of two training programs of adapted physical activity. Front Psychol 9: 828. DOI: 10.3389/fpsyg.2018.00828 .
8. Dodge R, Daly AP, Huyton J, Sanders LD (2012). The challenge of defining wellbeing. 2(3): 222–235. DOI: 10.5502/ijw.v2i3.4.
9. Emlet CA (2016). Social, economic, and health disparities among LGBT older adults. Generations 40(2): 16–22.
10. Grabovac I, Smith L, McDermott DT, Stefanac S, Yang L, Veronese N, Jackson SE (2019). Well-being among older gay and bisexual men and women in England: a cross-sectional population study. J Am Med Dir Assoc 20(9): 1080–1085.e1. DOI: 10.1016/j.jamda.2019.01.119.
11. Gross-Manos D, Shimoni E (2020). Where you live matters: Correlation of child subjective well-being to rural, urban, and peripheral living. J Rural Stud 76: 120–130. DOI: 10.1016/j.jrurstud.2020.04.009.
12. Grossman AH (2007). Conducting research among older lesbian, gay, and bisexual adults. J Gay Lesbian Soc Serv 20(1–2): 51–67. DOI: 10.1080/10538720802178924.
13. Harley DA, Gassaway L, Dunkley L (2016). Isolation, socialization, recreation, and inclusion of LGBT elders. In: Harley DA, Teaster PB (Eds). Handbook of LGBT elders: An interdisciplinary approach to principles, practices, and policies, pp. 563–581. Springer Science + Business Media. DOI: 10.1007/978-3-319-03623-6_30.
14. Hatzenbuehler ML (2016). Structural stigma: Research evidence and implications for psychological science. Am Psychol 71(8): 742. DOI: 10.1037/amp0000068.
15. King M, Semlyen J, Tai SS, Killaspy H, Osborn D, Popelyuk D, Nazareth I (2008). A systematic review of mental disorder, suicide, and deliberate self harm in lesbian, gay and bisexual people. BMC Psychiatry 8: 70. DOI: 10.1186/1471-244X-8-70.

16. Krefis AC, Augustin M, Schlünzen KH, Oßenbrügge J, Augustin J (2018). How Does the Urban Environment Affect Health and Well-Being? A Systematic Review. Urban Sci 2(1): 21. DOI: 10.3390/urbansci2010021.
17. Krout JA, Hash KM (2015). What is rural? Introduction to aging in rural places. New York: Springer Publishing Company. DOI: 10.1891/9780826198112.0001.
18. Lee MG, Quam JK (2013). Comparing supports for LGBT aging in rural versus urban areas. J Gerontol Soc Work 56(2): 112–126. DOI: 10.1080/01634372.2012.747580.
19. Leontitsis A, Pagge J (2007). A simulation approach on Cronbach's alpha statistical significance. Mathematics and Computers in Simulation 73(5): 336–340. DOI: 10.1016/j.matcom.2006.08.001.
20. Mark KM, McNamara KA, Gribble R, Rhead R, Sharp ML, Stevelink SAM, et al. (2019). The health and well-being of LGBTQ serving and ex-serving personnel: a narrative review. Int Rev Psychiatry 31(1): 75–94. DOI: 10.1080/09540261.2019.1575190.
21. Ministrstvo za naravne vire in prostor (2024). Mesta in druga urbana naselja. [online] [cit. 2024-05-05]. Available from: https://www.gov.si/teme/mesta-in-druga-urbana-naselja/
22. Mongelli F, Perrone D, Balducci J, Sacchetti A, Ferrari S, Mattei G, Galeazzi GM (2019). Minority stress and mental health among LGBT populations: An update on the evidence. Minerva Psichiatr 60(1): 27–50. DOI: 10.23736/S0391-1772.18.01995-7.
23. Mulé NJ, Ross LE, Deeprose B, Jackson BE, Daley A, Travers A, Moore D (2009). Promoting LGBT health and wellbeing through inclusive policy development. Int J Equity Health 8: 18. DOI: 10.1186/1475-9276-8-18.
24. Nedeljko M, Toplak Perović B, Grah M, Kaučič BM (2024a). Multi-generational challenges and mental health of LGBTQ+ older adults in Slovenia. Pielegniarstwo XXI wieku / Nursing in the 21st Century 23(3): 231–236. DOI: 10.2478/pielxxiw-2024-0033.
25. Nedeljko M, Toplak Perović B, Grah M, Kaučič BM (2024b). Exploring Disparities in Life Satisfaction among LGBTQ+ Older Adults in different Living Environments: The Case of Slovenia. Open Access Mac J Med Sci 12(2): 214–220. DOI: 10.3889/oamjms.2024.11870.
26. Oswald RF, Culton LS (2003). Under the rainbow: Rural gay life and its relevance for family providers. Fam Relat 52(1): 72–81. DOI: 10.1111/j.1741-3729.2003.00072.x.
27. Pachankis JE, Bränström R (2018). Hidden from happiness: Structural stigma, sexual orientation concealment, and life satisfaction across 28 countries. J Consult Clin Psychol 86(5): 403–415. DOI: 10.1037/ccp0000299.
28. Parr H (2004). Medical geography: critical medical and health geography? Progr Hum Geog 28(2): 246–257. DOI: 10.1191/0309132504ph484pr.
29. Poon CS, Saewyc EM (2009). Out yonder: Sexual-minority adolescents in rural communities in British Columbia, Am J Public Health 99(1): 118–124. DOI: 10.2105/AJPH.2007.122945.
30. Reio TG, Jr., Shuck B (2015). Exploratory factor analysis: implications for theory, research, and practice. Adv Dev Hum Resour 17(1): 12–25. DOI: 10.1177/1523422314559804.
31. Republic of Slovenia – Statistical Office (2024). [online] [cit. 2024-05-05]. Available from: https://www.stat.si/StatWeb/en/Field/Index/17
32. Requena F (2016). Rural-Urban living and level of economic development as factors in subjective well-being. Soc Indic Res 128(2): 693–708. DOI: 10.1007/s11205-015-1051-1.
33. Roberts LM, Christens BD (2021). Pathways to well-being among LGBT adults: Sociopolitical involvement, family support, outness, and community connectedness with race/ethnicity as a moderator. Am J Community Psychol 67(3–4): 405–418. DOI: 10.1002/ajcp.12482.
34. Rohde L, Larsen TS, Jensen RL, Larsen OK (2019). Framing holistic indoor environment: Definitions of comfort, health and well-being. Indoor Built Environ 29(8): 1118–1136. DOI: 10.1177/1420326X19875795.
35. Smith AJ, Hallum-Montes R, Nevin K, Zenker R, Sutherland B, Reagor S, et al. (2018). Determinants of transgender individuals' well-being, mental health, and suicidality in a rural state. J Rural Ment Health 42(2): 116–132. DOI: 10.1037/rmh0000089.
36. Sullivan LJ, Asselin ME (2013). Revisiting quality of life for elders in long-term care: an integrative review. Nurs Forum 48(3): 191–204. DOI: 10.1111/nuf.12030.
37. Sweileh W (2022). Bibliometric analysis of peer-reviewed literature on mental health and well-being of LGBT adolescents. Ment Health Soc Incl 26(4): 374–388. DOI: 10.1108/MHSI-02-2022-0013.
38. Thompson J (2022). Are urban spaces queer-friendly places? How geographic context shapes support for LGBT rights. OSF Preprints. DOI: 10.31219/osf.io/d4e86.
39. United Nations (2004). World urbanization prospects: the 2003 revision, UN. Population Division, 323 p.
40. Werth JL, Jr., Hastings SL Riding-Malon R (2010). Ethical challenges of practicing in rural areas. J Clin Psychol 66(5): 537–548. DOI: 10.1002/jclp.20681.
41. Wienke C, Hill GJ (2013). Does place of residence matter? Rural-Urban differences and the wellbeing of gay men and lesbians. J Homosex 60(9): 1256–1279. DOI: 10.1080/00918369.2013.806166.
42. Willging CE, Salvador M, Kano M (2006). Pragmatic help seeking: How sexual and gender minority groups access mental health care in a rural state. Psychiatr Serv 57(6): 871–874. DOI: 10.1176/ps.2006.57.6.871.
43. WHO (1998). Wellbeing measures in primary health care/the DepCare Project: report on a WHO meeting: Stockholm, Sweden, 12–13 February 1998. Regional Office for Europe, 36 p.
44. Wright SL, Canetto SS (2009). Stereotypes of older lesbians and gay men. Educ Gerontol 35(5): 424–452. DOI: 10.1080/03601270802505640.
45. Žepič Milič Z (2021). Improvement of cognitive abilities of older employees with computerized cognitive training (CCT). IFAC-PapersOnLine 54(13): 651–656. DOI: 10.1016/j.ifacol.2021.10.525.