Vilnius University Press

Content lists are available at VilniusUniversity Press

Transformations In Business & Economics
2025, Vol. 24 No 2 (65), pp.591-606.

E-ISSN 2538-872X
https://doi.org/10.15388/Tibe.2025.24.2.27

Chapter: Understanding and Reshaping Socioeconomic Development to Overcome Challenges

INQUIRY OF SUICIDE RATES AND THEIR LIAISON WITH SOCIOCULTURAL AND SOCIOECONOMIC INDICATORS IN SPAIN

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Annotation. In Spain, the suicide rate has been on the rise for the past few years. Research shows that people between the ages of 51 and 64 are at the greatest risk of an increased rate of suicide. The number of people committing suicide has also increased among older in recent years. The goal of this paper is an exploratory analysis of the relationship between four social dimensions and the suicide rates in different regions in Spain, without considering people diagnosed with psychological problems or mental disorders. Results showed some areas with the highest number of suicides. Remarkable Canaries region presented huge suicide rates among its population, with suicide being among the upper incidence causes of death in the region. We can highlight slight associations between leisure/social relations and satisfaction with life with the number of suicides in men, which could be contrasted with differences between the autonomous states of Spain.

Keywords: suicide, human development, quality of life, public health, statistical methods.

JEL classification: I3, I250, I310, I180, C1.

Introduction

Currently, in Spain, one of the greatest challenges affecting the society is the increasing number of suicide deaths, particularly in highly developed regions or those with large populations, with suicide being the fourth most common cause of death. Consequently, government authorities consider it a public health issue that affects every social class (Fitzpatrick, 2018). As referenced by Ahidar-Tarhouchi and Ortiz-de-Urbina-Criado, the healthcare sector is "generating huge amounts of complex and sensitive data" (Ahidar-Tarhouchi *et al.*, 2023) from which it can be seen that since 2013, the increase in the

Submitted on April 2024. Accepted on November 2024.

number of suicide cases has been approximately 2% of the population, with men three times more likely to commit suicide than women. Additionally, data reported on the suicide rate between 2017 and 2021 showed a linear trend of increase of 8.19% compared with the four years prior to these reports (Isabel *et al*., 2017). Individuals' well-being and their environment are considered to play a role in the population's psychological and emotional state, aside from being influential factors in decision-making when individuals with mental disorders are not considered. This study focuses on suicide risk based on mental health; however, it considers suicide beyond being a mental health issue; the reasons individuals consider suicide are also associated with social aspects and life crises that arise owing to a failure in social alteration, problems in interpersonal or romantic relationships, unemployment, and stress associated with work or finances (Camacho *et al*., 2021). Indeed, Muñoz-Céspedes *et al*., referencing Klapper and Lusardi, go so far as to say that "Financial education prevents social and financial exclusion, and promotes present and future material well-being and financial resilience" (Muñoz Céspedes *et al*., 2024). Other studies have shown that social cohesion and community factors provide insights into the complex explanation of suicide trends (Alvarez-Galvez *et al*., 2021). For example, compartmental model studies assess factors that influence suicidal behaviour that are relevant as potential causes and risk intensifiers (De la Poza *et al*., 2018). Other causes such as facing humiliation from family or friends; experiencing bullying; and dealing with problems associated with sexual orientation, academic failure, depression, and anxiety are warning indicators of impulsive behaviours that may be associated with suicidal ideation (Gonzalez *et al*., 2023).

1. Theoretical Framework

This study provides limited indicators of the association between multiple theoretical models with their foundations in sociology, psychology, and public health, as well as how sociocultural, economic, and environmental factors influence suicide in Spain. The exploration of these associations is based on Durkheim's social integration, cumulative disadvantage, ecological systems, Maslow's hierarchy of needs, and life satisfaction theories.

Individuals are less likely to commit suicide when they feel integrated into the society and its accompanying institutions; therefore, suicide varies inversely with the degree of integration with the social groups in which individuals are part of (Durkheim, 1952; Nahdiyah *et al*., 2022; Linhartova, Jan Pucek, 2024; Ngoc *et al*., 2024). This study proposes that leisure and social relationships as protective or risk factors of suicide show a low but significant positive correlation between suicide and social ties, reinforcing Durkheim's theories that 'certain social environments may induce or perpetuate or aggravate the suicide potential,' which may provide a position from which we may 'establish laws of generalised occurrence' while maintaining that social isolation or a lack of social support may increase an individual's risk of suicide (Russo *et al*., 2022; Simpson, 1952).

However, the cumulative disadvantage theory suggests that disadvantages in early life, such as a low or inadequate level of education or disadvantaged social conditions, may have a lasting effect on health (DiPrete, 2006). Public health model ranges from the theories provided by Turecki *et al*. (2016), Abraham *et al*. (2021), Alvarez *et al*. (2021), and Isabel *et al*. (2017). It suggests the multivariate nature of suicide prevention that the different dimensions under investigation imply in their consideration of economic, cultural, and environmental factors. The results of this study emphasise the need for targeted interventions based on regional variations in areas such as education, environment, and social support, with regional disparities pointing to the influence of local conditions on suicide (Aviad *et al*., 2017; Bergmans *et al*., 2021). Finally, sex differences and social vulnerability associated with age are

theoretical issues that underpin this study, identifying how social, educational, and environmental factors may affect men and women differently. Stronger correlations between men and women suggest that vulnerabilities may be sex-based, which can provide a basis for further research. Integration may also account for vulnerabilities associated with age, as older populations have higher suicide rates, indicating that isolation and decreased social roles may exacerbate the risk of suicide (Canetto, 2021; Fitzpatrick *et al.*, 2018; Gonzalez *et al.*, 2023).

1.1 Literature Review

Several studies have described the relevance of considering exploratory studies to determine factors that increase the suicide rate in the country. Studies have shown an association between the characteristics of one's social environment—for example, collective aspects such as education, social relationships, surroundings, and life satisfaction—which may act as red flags that can be considered for the prevention of an increased risk of suicide (Santurtún *et al.*, 2018). In some countries, education shows unequal levels, indicating a difference in skills and competition among the population in terms of obtaining opportunities to improve quality of life or limiting groups that cannot complete high school or university (Marginson, 2016). In the United States, students who did not graduate from high school with their peers were at an increased risk of not finding opportunities for employment and financial stability, which might be associated with an increased risk of suicide. Surroundings and the environment also influence mental health; thus, comfort in urban public spaces should be explored, as it can affect how individuals use and occupy their leisure spaces. Reports in Norway established that a well-designed urban microclimate could extend the time individuals spend in spring and autumn by six weeks. Other studies conducted in the UK found an association between microclimates and the number of individuals using public spaces. Hence, by enhancing the comfort of urban spaces and public activities, such as walking and cycling, can be promoted to benefit the population's emotional state (Jiang *et al.*, 2019; Zacharias *et al.*, 2001). Life satisfaction is another important factor. Several studies have demonstrated the stability of life satisfaction judgments over time, suggesting that life satisfaction is a more enduring construct than previously believed. Furthermore, life satisfaction can change in response to significant life events or changes in circumstances such as getting married, having a child, or losing a job (Heisel, Flett, 2004, 2022). Life satisfaction is a complex and multifaceted construct influenced by both top-down (personality disposition) and bottom-up (current mood and life circumstances) factors. The relative importance of these factors varies from person to person and may be influenced by cultural norms or the environment. However, life satisfaction can be influenced by current mood and tends to stabilise over time. In addition, significant life events or changes in circumstances influence life satisfaction (Anglim *et al.*, 2020; Van Orden, Deming, 2018).

This study aimed to demonstrate variations between age groups, sex, and regions, in addition to the fact that socioeconomic and social factors might influence the increase in suicide death rates in Spain. Therefore, the following hypothesis is proposed: Socioeconomic and social factors significantly influence the increase in suicide death rates in Spain.

1.2 Methods and Data Collection

Using data reported in the database of survey data from the National Institute of Statistics of the Government of Spain (INE), we conducted an exploratory analysis to identify trends and associations of suicide rates for age groups, sex, and regions and their relationship with the four social factors: education, surroundings and environment, leisure and social relationships, and life satisfaction. In

addition, a comparative study was conducted to determine the influence or lack thereof on the differences between the rates of suicide in Spain.

From data reported in the database of survey data of the National Institute of Statistics the government of Spain (INE), we carry out an exploratory analysis to identify trends and relations of the suicide rates for age groups, gender, and region and their relation in four social factors: education, surrounding and environment, leisure and social relationships and satisfaction with life besides, a comparative study to check the influence of the ratio of suicide differences in Spain.

2. Statistical Analysis of Suicide Rates

Data from 2017 to 2021 were obtained based on the data reported on suicide numbers by the INE. We examined and compared the means for these years. The data are shown in a bar chart comparing 19 autonomous communities and suicide rates by age group, region, and sex. However, there was a limitation on the sample size; therefore, the results were more representative.

2.1 Quantification of Sociocultural and Socioeconomic Indicators

The data corresponded to a sample size of 100 individuals randomly surveyed per community, with 50 men and 50 women in each of the 17 communities and two autonomous cities. Thus, data were extrapolated to the total population of each community. The mean and standard deviation of each sex in 2017, 2018, 2019, 2020, and 2021 were calculated.

In each dimension, all data were normalised, and the mean and standard deviation by region were estimated. Data were standardised using a z-score normalisation method. Thus, the number of individuals with a non-favourable degree of satisfaction was analysed. Moreover, the Pearson correlation coefficient was used to examine the degree of association between suicide rates and the four dimensions: education, leisure and social relationships, surroundings and environment, and life satisfaction. All graphs were created using Python 3.10, importing statistics (NumPy, Statmodels, and Panda), graphic plots, and visualisation libraries (ggplot) in the R program.

Dimension: Education

In this dimension, the raw values of the four indicators reflecting educational level were considered. The educational levels reached by the adult (25–64 years old, 65 years and older), young (18–24 years old), and the 'early abandonment of education' populations (18–24 years old) were measured, thus illustrating the skills and abilities of the population per region based on reports from 2017 to 2020 from the open-access database.

Dimension: Leisure and Social Relationships

This dimension was obtained from an INE enquiry conducted among individuals aged 16 years and older. To measure the degree of satisfaction, seven questions were used: satisfaction with time available; attendance at cultural and sporting events; social relationships; frequency of meetings with friends, family, or colleagues; satisfaction with personal relationships; having someone to talk to about personal issues; and trust in others. The scale ranged from 0 (not satisfied at all) to 10 (completely satisfied).

Dimension: Surroundings and Environment

Environmental conditions directly or indirectly affect the present and future health and well-being of individuals and may compromise them. A survey by the INE was conducted with individuals aged 16

years and older. The degree of satisfaction was measured on a scale from 0 to 10 using five questions: inhabitants who suffered from pollution and other environmental problems, inhabitants who suffered from noise pollution produced by neighbours or external environment, the urban population exposed to air pollution (PM10 and PM2.5), access to green and recreational areas, and satisfaction with green and recreational areas (Stickley *et al*., 2017).

Dimension: Life Satisfaction

In this dimension, a subjective assessment of one's life in general was provided by the participants, including a global evaluation of a set of past and present experiences, considering different aspects of life. A survey by the INE was conducted with individuals aged 16 years and older, where satisfaction was measured on a scale from 0 to 10 using three questions: global satisfaction with life, positive feelings, and meaning and purpose of life.

3. Results

3.1 Accumulative Suicide Rate by Region and Sex

The increasing incidence of suicide in men was higher than that in women in all regions, with an average of 4.3 compared with 14.7 in men per 100,000 population. In addition, the rate of increase in suicide in men was higher than that in women in most regions, with an average of 2.9% (men) versus 2.1% (women) over the five years.

Table 1. Population data by region and autonomous communities the accumulative rate of suicides by gender in Spain, 2017-2021

Region	Population			Cumulative incidence of suicides in men*	Cumulative incidence of suicides in Woman*	Increase* Men (%)	Increase* Woman (%)
	Men	Woman	Total				
Andalucía	4.151.769	4.271.288	8.423.057	12.3	4.5	5,1	1,1
Aragón	650.678	667.806	1.318.484	10.2	3.8	2,2	0,8
Asturias. Principado de	488.303	535.013	1.023.316	14.6	6.6	4,6	5,6
Balears Illes	571.727	576.056	1.147.784	24.8	4.5	2,8	1,0
Canarias	1.063.096	1.084.522	2.147.618	15.7	4.3	7,0	2,1
Cantabria	282.222	299.581	581.803	12.3	3.9	3,8	-0,9
Castilla y León	1.182.995	1.219.519	2.402.514	13.9	5.1	2,1	2,2
Castilla - La Mancha	1.019.556	1.017.630	2.037.186	15.4	4.2	3,5	-1,2
Cataluña	3.771.489	3.903.502	7.674.991	9.4	3.8	1,0	0,2
Comunitat Valenciana	2.466.289	2.538.606	5.004.894	14.6	6.2	2,0	0,9
Extremadura	529.016	539.780	1.068.796	12.8	3.3	0,9	0,6
Galicia	1.300.284	1.401.125	2.701.409	24.7	5.9	4,2	4,2
Madrid Comunidad	3.184.840	3.471.119	6.655.959	15.4	4.6	-2,2	-0,6
Murcia Región	748.211	746.272	1.494.483	15.8	3.5	2,4	-0,2
Navarra Comunidad Foral	323.492	330.055	653.547	16.4	5.9	2,0	5,4
País Vasco	1.072.913	1.134.191	2.207.104	16.2	5.1	-2,0	-0,2
Rioja. La	156.621	160.892	317.513	13.2	4.1	0,3	-0,4
Ceuta	42.775	41.745	84.520	10.1	0.9	-4,6	-1,0
Melilla	43.811	42.655	86.466	10.8	2.3	-3,4	-0,6

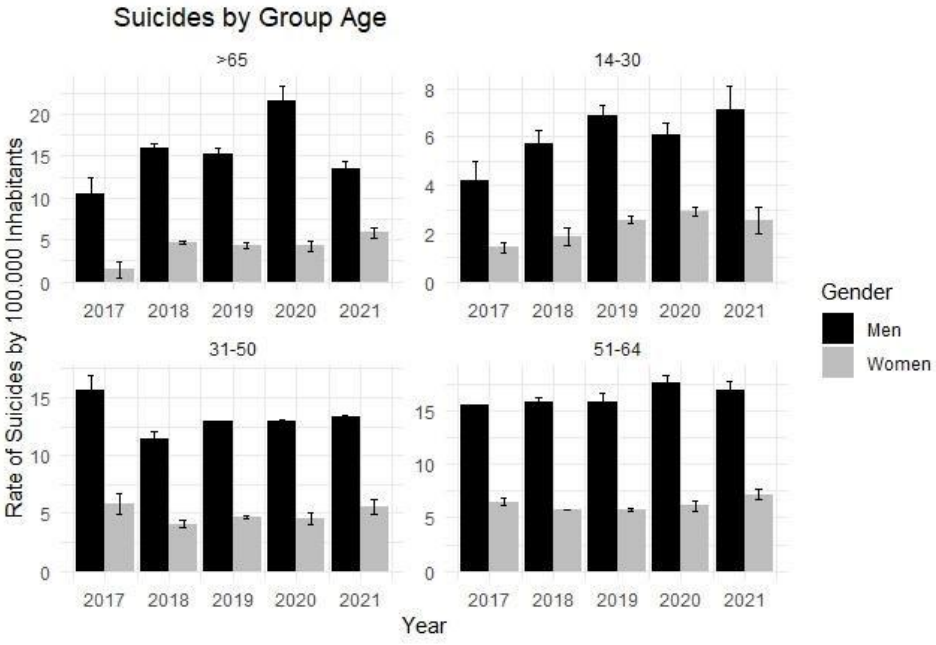
Notes: value to 5 years (from 2017 to 2021).

Source: own calculations.

The regions with the highest incidence and increase in suicide in men were Galicia (24.7), the Balearic Islands (24.8), and Basque Country (16.2). The regions with the highest percentage increase in suicide among men were the Canary Islands (7.0%), Andalusia (5.1%), and Asturias (4.6%). However, the regions with the highest incidence and increase in suicide in women were the Valencian Community (6.2), Asturias (6.6), and Navarra (5.9). The regions with the highest percentage increases in suicide in women were Asturias (5.6%), Navarra (5.4%), and Galicia (4.2%). By contrast, Ceuta (5.5), Melilla (6.6), and Catalonia (6.6) had the lowest cumulative incidence of suicide for both sexes. The regions with the lowest percentage increases in suicide for both sexes were Madrid (1.4%), the Basque Country (1.1%), and Castile-La Mancha (1.2%) (*Table 1*).

3.2 Rate of Suicide by Group Age and Sex

The initial result of interest was obtained from the comparison of suicide mortality rates, which showed that the suicide mortality rate was higher in the age group above 65 years than in all other age groups examined each year. This may indicate that older individuals have more risk factors or fewer preventive resources than younger individuals. The rate was lower in the age group of 14–30 years than in the other age groups examined in each year. This result suggests that younger individuals have more protective factors or social support than older individuals. The suicide mortality rate also increased in all age groups from 2017 to 2021, particularly in the age group of 51–64 years (data are shown in a linear chart in *Figure 1*).



Source: bar error: standard deviation. Data was obtained from the National Statistical Institute (INE).

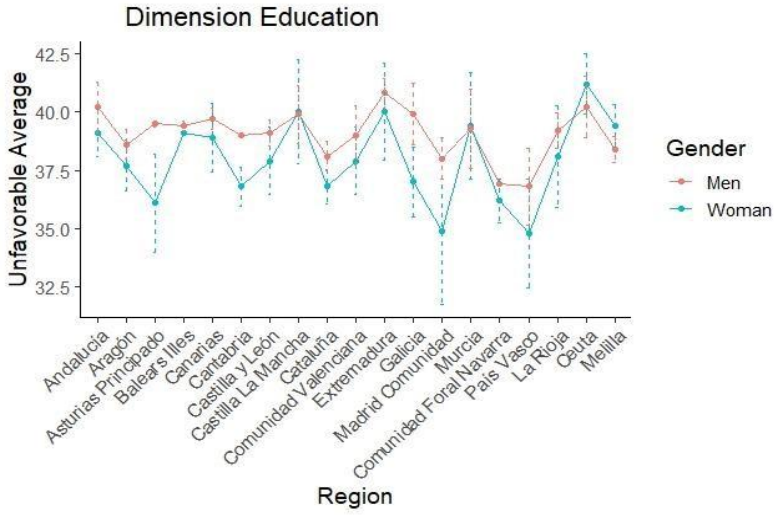
Figure 1. **Rate of Mortality by Suicide in Four Age Groups (14-30, 31-50, 51-64, and >65 age) by Gender in Spain, 2017-2021**

This result may reflect the effect of the COVID-19 pandemic, particularly in men aged 65 years and older (2020), or the increase in stress and anxiety in this age group.

3.3 Results of Quantification of Sociocultural and Socioeconomic Indicators

Dissatisfaction with Education

The region with the highest average of individuals who are unhappy with their education is Extremadura, with a value of 41.2% for men. The region with the lowest average of individuals who are unhappy with their education is the Basque Country for women, with a value of 34.9%, compared with the Community of Madrid (34.7%). Thus, the national average of individuals who are unhappy with their education is 39.1% for men and 38% for women, indicating an educational difference of 6.5% between the different regions of Spain and 1% between sexes. However, the standard deviation of each region shows the variability in the data (the data are shown in a linear chart in *Figure 2*). Some regions have a higher standard deviation than others, indicating a heterogeneity in individuals' opinions regarding their education.



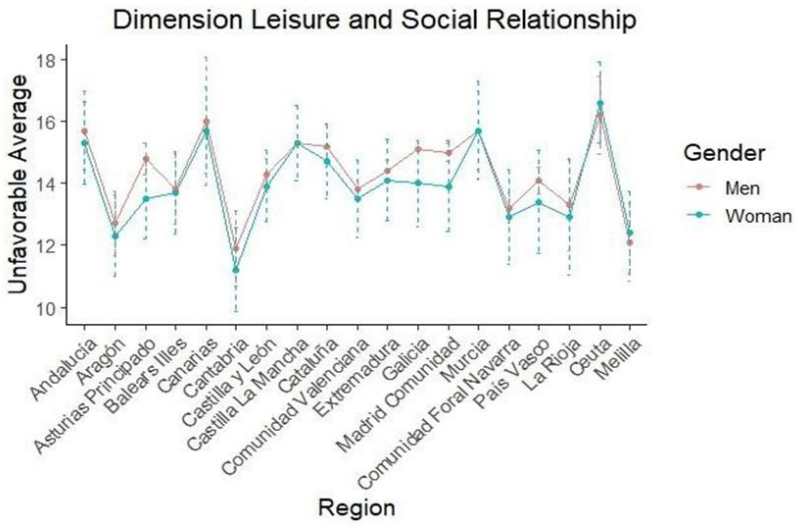
Source: bar error: standard deviation. Data was obtained from the National Statistical Institute (INE).

Figure 2. **Average of People non-Favourably Disposed to Educational Level Achieved per Autonomies Region in Spain, 2017-2021**

The result also reflects unknown indices as critical factors in the increased incidence of suicide. Nevertheless, studies using hierarchical linear modelling (HLM) as a predictor of variables indicate that individual-level aptitudes and other Level 2 variables can regulate decision-making in suicide, with a higher incidence of suicide than their counterparts in nations with relatively high suicide rates (Stack, Kposowa, 2008).

Dissatisfaction with Leisure and Social Relationships

The Canary Islands have the highest average of disadvantaged individuals, with a value of 16%, followed by Andalusia (15.7%) and Murcia (15.8%) for both sexes.



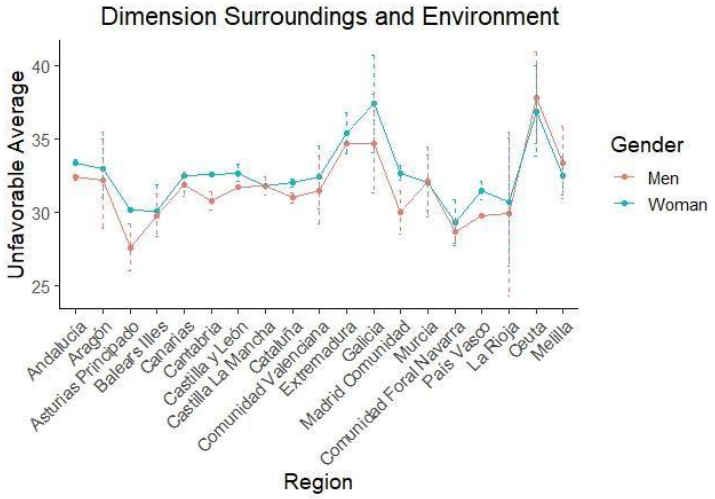
Source: bar error: standard deviation. Data was obtained from the National Statistical Institute (INE).

Figure 3. **Average of People non-Favorably Disposed to their Leisure and Social Relationships per Autonomous Region in Spain, 2017-2021**

However, Ceuta has a higher value than the other regions, which becomes non-representative of the whole owing to its low population (data are shown in a linear chart in *Figure 3*). Cantabria has the lowest average of disadvantaged individuals, with a value of 11.2%.

Dissatisfaction with Surroundings and Environment

The Principality of Asturias (27%) is the region with the lowest average of individuals who are dissatisfied with their surroundings and environment, particularly for men, followed by Navarra (28%) and Madrid (30%). Galicia (37%) has the highest average of individuals who are dissatisfied with their surroundings and environment, particularly for women, followed by Ceuta (36.5%; this region is excluded because it is still experiencing socioeconomic problems). In addition, Extremadura (36.5%) showed an increased level of average of individuals who are dissatisfied with their surroundings and environment. Regions with the highest population density and greatest level of urbanisation tend to have higher levels of dissatisfaction with their surroundings and environment, such as Madrid, Catalonia, and the Community of Valencia, than those with the lowest population density and a lower degree of urbanisation, such as Galicia. The national average of individuals who are dissatisfied with their surroundings and environment is 10.4% (data are shown in a linear chart in *Figure 4),* indicating that Spaniards perceive a breach in their quality of life regarding their surroundings and environment.



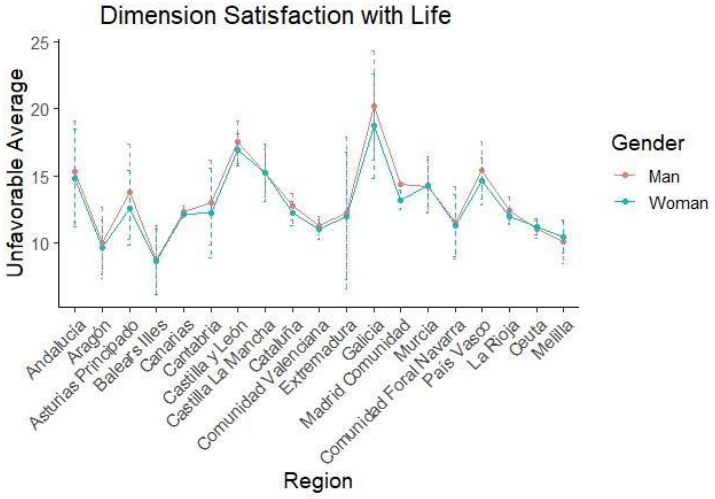
Source: bar error: standard deviation. Data was obtained from the National Statistical Institute (INE).

Figure 4. **Average of People non-Favorably Disposed to their Surroundings and Environment per Autonomous region in Spain, 2017-2021**

Thus, differences in satisfaction with their surroundings and public services tend to reflect a minority of the population, and this tendency is a persistent characteristic of the evaluated dimensions.

Dissatisfaction with Life

Galicia (21%) has the highest percentage of individuals who are unhappy with life, followed by Castile and León (17%) for both sexes. The Balearic Islands (7.2%) have the lowest percentage of individuals who view life satisfaction unfavourably, followed by Aragon (8.1%) and the Community of Valenciana (11%). The national average of individuals who are unhappy with life is 13.4% (data are shown in a linear chart in *Figure* 5).



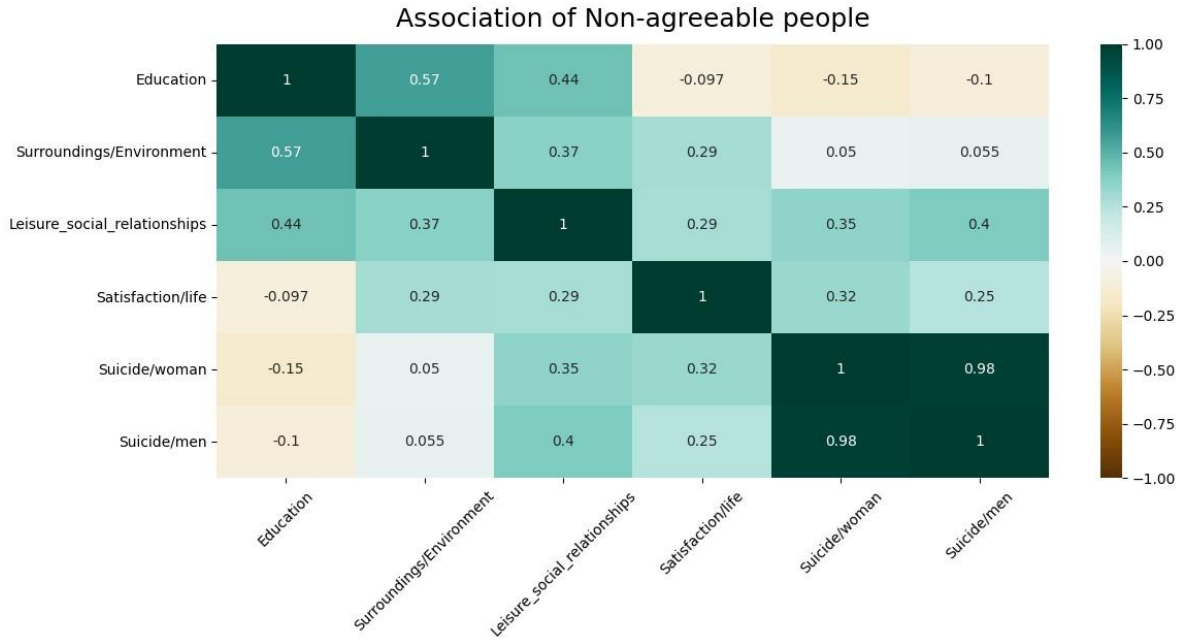
Source: bar error: standard deviation. Data was obtained from the National Statistical Institute (INE).

Figure 5. **Average of People non-Favorably Disposed to Satisfaction with Life per Autonomous region in Spain, 2017-2021**

A negative correlation was found between the percentage of individuals who are not happy with life and the level of per capita income in regions with higher dissatisfaction than in regions with the lowest dissatisfaction for both sexes, with no significant evident from the data examined, indicating the counterintuitive hypothesis that overall life satisfaction is neither a preventative nor a causative effect on suicide in Spain.

3.4 Suicide Rate and Associated Factors

Using the size correlation, where 0.9–1.00 indicates a high positive correlation and 0.0–3.0 indicates a negligible correlation, the correlation coefficient for suicide/men was positively higher than that for suicide/women, with a value of 0.98. The leisure and social relationship dimension showed a lower positive correlation for suicide/men (0.4) than for suicide/women (0.35). Interestingly, the association between life satisfaction and individuals dissatisfied with their surroundings and environment was not significant, with a value of 0.25. However, the surroundings and environment dimension has a moderate correlation (0.57) as with education (data are shown in a linear chart in *Figure 6*).



Source: data was obtained from the National Statistical Institute (INE).

Figure 6. **Heat Map of Association Level Using the Pearson Correlation of non-Favorable People of the 4 dimensions versus Average of Suicides in Spain, 2017-2021**

All correlations were based on a scale of strong associations (Liang *et al*., 2019).

4. Discussion

In the context of influences on suicidal behaviour, the choice of education, social relationships, surroundings, and life satisfaction may be justified for several reasons. First, education is often considered a protective factor against suicide because it is associated with better problem-solving skills, critical thinking, emotional intelligence, and access to resources that can help individuals cope with stressors (Abraham, Sher, 2021; Ko *et al*., 2021). Therefore, in communities where women are more highly educated than men by a large difference, the difference in the number of suicide between men and women reflects this gap, pointing to the effect of education as a significant factor in the number of

suicide by sex per region. Of the 12 regions that demonstrate this tendency, five show a strong correspondence in this regard, whereas only two regions do not seem to follow this pattern (*Figure 2*). More detailed studies that document the extent of this correlation may be useful to show the effect of education as an influential factor in suicide prevention, while an investigation of the dimension's age group may also provide further evidence to confirm or deny this correlation (Pirkola *et al.*, 2009).

Second, a similar but weaker pattern may be found in terms of the sex-based gap between satisfaction with leisure and social relationships, where the four regions demonstrated a significant difference between men and women's satisfaction with leisure and social relationships. In the four regions that demonstrate this gap, three show a corresponding relationship with suicide by sex, whereas the fourth shows a slight correlation in terms of this tendency, indicating that satisfaction with this dimension may have an effect on individuals' decisions to take their own lives. Further studies on this correlation, particularly in terms of age group, may provide a useful tool for preventative measures that may help combat the steady increase in suicide. Social relationships play a critical role in suicide risk because social isolation and loneliness are significant risk factors (Murayama *et al.*, 2012). Examining the influence of social relationships on suicide can help identify ways to enhance social support and reduce social isolation, thus reducing suicide risk (Li *et al.*, 2021).

Third, in terms of satisfaction with their surroundings and environment, a correlating gap between sexes in the number of suicide can be found; however, the association is slightly weaker. Of the six regions that demonstrate a slight difference in sex with satisfaction with environment and surroundings, two regions do not follow this trend, whereas three reflect this tendency and one shows a slight association (*Figure 3*). Further studies about this correlation, particularly a breakdown in terms of age group, may provide a useful tool to prevent the increase in suicide. Thus, surroundings, such as living conditions, access to resources, and neighbourhood characteristics, can affect suicide risk (Bergmans *et al.*, 2021). For instance, individuals living in poverty or areas with limited access to healthcare may face a greater suicide risk (Pasic *et al.*, 2020). Hence, studying the influence of the surroundings on suicide helps identify potential targets for intervention.

Finally, a low correlation between men who are dissatisfied with life and suicide risk was observed, with a value of 0.25; however, a low positive correlation between women and increased suicide mortality rates was observed, with a value of 0.35. Compared with other studies, life satisfaction is intricately associated with suicide risk (Takeda *et al.*, 2015). Individuals who report low life satisfaction are more likely to experience suicidal ideation and engage in suicidal behaviours (Cramer *et al.*, 2020; Russell *et al.*, 2011). Factors such as depression, abuse, and hopelessness should be considered in their influence on suicide, although they may not be the focus of every study.

Conclusions

An analysis of the population of Spain's Autonomous Communities that expressed satisfaction with their leisure time, activities, and social relationships revealed significant patterns. The communities with the highest percentage of the population that expressed dissatisfaction with their leisure time and activities were Ceuta, Galicia, and Extremadura, with over 30% of the population expressing discontent with this aspect of their lives. Galicia's population had expressed dissatisfaction with their leisure time and activities, while it also had the second highest suicide rate among the Autonomous Communities in Spain during this period, which might be key a factor for public prevention policies (Fond *et al.*, 2015; Tousignant *et al.*, 2013; Turecki *et al.*, 2019).

The five Autonomous Communities whose populations show the highest levels of dissatisfaction with their surroundings and environment are Galicia, Castile and León, Andalucía, the Basque Country, and Castile-La Mancha, showing that 30% or higher of the population are unhappy with their surroundings and environment. The levels of unfavourable perceptions of one's surroundings and environment were moderately negative, and when compared with suicide rates, patterns could be observed mainly in Andalusía and the Canary Islands. Thus, the relationship between the two fields can be determined. However, this result was insufficient to find significant differences between communities, requiring a larger sample size to evaluate with greater precision the relevance of this dimension as a factor that influences suicide rates.

Finally, there was an association between suicide in men and women despite differences in the number of cases, with men reporting four to five times more cases. Consequently, there was a moderate positive association between the surrounding and environment and education dimensions, indicating that they might maintain a dependent synergy. Finally, a low positive correlation between suicide numbers in men and leisure and social relationships was found, indicating that this dimension might influence the increase in the incidence of suicide in men and life satisfaction in women in Spain. Further studies are required to reveal the factors that may be key to creating better public health policies to address the alarming increase in suicide in the country.

Limitations

This study has some limitations. All dimensions and associated questions were not surveyed owing to the constraints imposed by the survey designed by the National Statistical Institute. Consequently, the validity and reliability of the data were limited. Further information on the responses of specific age groups would help analyse the data and observe patterns by associating suicide by age group with the attitudes expressed towards the dimensions in the analysis. Moreover, a larger sample size is required to understand the effect of dissatisfaction with one's surroundings on suicide rates. Finally, it is important to promote evidence-based public health policy research to gain deeper insights into the intricate relationship between sociocultural factors and suicide in Spain, considering the emerging future trend.

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SAVIŽUDYBIŲ LYGIO ANALIZĖ IR JŲ RYŠYS SU SOCIOKULTŪRINIAIS BEI SOCIOEKONOMINIAIS RODIKLIAIS ISPANIJOJE

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Santrauka. Ispanijoje savižudybių skaičius pastaraisiais metais auga. Nacionalinio statistikos instituto duomenimis, 2017 m. buvo įvykdyta 8230 savižudybių, tai 8 % padidėjimas, palyginti su ankstesniais metais. Tyrimai atskleidė, kad didžiausią savižudybių riziką patiria vyresni nei 31 metų žmonės. Šioje amžiaus grupėje savižudybių rodiklis yra daugiau nei dvigubai didesnis nei jaunesnių žmonių grupėje. Tačiau pastaraisiais metais savižudybių skaičius tarp jaunesnių žmonių taip pat išaugo. Šio darbo tikslas – atlikti tyrimą, išanalizuoti keturias socialines dimensijas: švietimą, aplinką, laisvalaikį / socialinius santykius ir pasitenkinimą gyvenimu. Taip pat siekiama palyginti gautus rezultatus su savižudybių rodikliais įvairiuose Ispanijos regionuose atsižvelgus į lyčių skirtumus. Rezultatai atskleidė, kad Andalūzijos regione – aukščiausias rodiklis, vidutiniškai siekiantis 213 mirčių, po to – Katalonija, Valensijos bendruomenė ir Madridas. Taip pat nustatyta, kad Kanarų salose savižudybių rodiklis buvo labai aukštas, tai yra viena iš dažniausių mirties priežasčių šiame regione. Nustatyta sąsaja tarp tam tikrų socialinių dimensijų: pasitenkinimo laisvalaikiu / socialiniais santykiais, švietimo lygio, pasitenkinimo aplinka ir pasitenkinimo gyvenimu su savižudybių skaičiumi pagal lytį.

Reikšminiai žodžiai: savižudybė; žmogaus vystymasis; gyvenimo kokybė; visuomenės sveikata; statistiniai metodai.