**Italian Sociological Review**
ISSN 2239-8589
DOI: 10.13136/isr.v15i3.913 2025, 15(3), pp. 671 – 694

# The Role of Sociodemographic and Territorial Factors in Influencing the Subjective Quality of Life. First Results Based on the Italian Panel Survey ITA.LI

Luca Bottini[a]

**Abstract**

The topic of quality of life (QOL) is one of the most important fields of study in social science since decades. Although various branches of the social sciences have addressed this topic, sociology undoubtedly represents a particularly relevant field for this inquiry. Specifically, this article aims to valorize the role played by sociodemographic and territorial variable in influencing subjective quality of life (Subj-QOL). The theoretical framework of Subj-QOL chosen for this article is rooted in three pivotal dimensions: the material well-being, the residential satisfaction and the psychological well-being. Even though the concept of QOL potentially spans to several domains and sub-concepts, a more focused approach has been followed by selecting the most important conceptual areas of an individual's subjective well-being. The analysis of objective QOL, in fact, should go hand in hand with Subj-QOL in order to lead the activity of policy making and decision-making processes. This article presents the results of a first outlook to the data coming from a recently established longitudinal study on social transformations based in Italy (ITA.LI). The study relies on data from the first wave of the survey and, therefore, does not adopt a longitudinal approach but rather a cross-sectional one. On the one hand, the objective is to identify groups within the Italian population that represent different types of Subj-QOL; on the other hand, it aims to assess the role of sociodemographic and territorial variables in determining the likelihood of belonging to each specific group.

Keywords: subjective quality of life, quality of life, survey panel, cluster analysis, multinomial logistic model.

[a] Department of Sociology and Social Research, Università degli Studi di Milano Bicocca, Italy.

Corresponding author:
Luca Bottini
E-mail: luca.bottini@unimib.it

Received: 3 February 2025
Accepted: 5 June 2025
Published: 12 September 2025

## 1. Introduction

The study of QOL has been an important area of inquiry in the social sciences at least from the second half of the XX century. The comprehensive and multifaceted nature of this topic, explored not only in academic research but also in policy making and media, highlights its inherent multidimensionality, which requires a clear understanding for effective investigation. A scientific approach to the subject allows for the emergence of details that a simplistic viewpoint, solely relying on aggregated data, would fail to effectively reveal. The present article aims to present the results of a nationwide longitudinal social survey in Italy ("ITA.LI" - Italian Lives). This survey has been designed to be nationally representative of Italian citizens, with the aim to investigate various aspects of individuals' social lives, including work, education, residential mobility, QOL, personality traits, health, education, and socio-economic status. The completion of the first wave of data collection has provided an initial dataset consisting of multiple variables. For this contribution, a selection of available variables was made, focusing on those related to the analysis of Subj-QOL. According to this multi-faceted approach in defining the concept of Subj-QOL, as the level of quality of a wide range of features of the individuals' subjectivity, the definition of the observed variable (which measures the construct of Subj-QOL) included three areas of interest such as material satisfaction, residential satisfaction, and psychological well-being. These dimensions were chosen to encompass three fundamental aspects of individuals' lives. Firstly, the material-corporeal dimension pertains to the biological aspect and satisfaction of basic needs. Secondly, the satisfaction related to the living environment encompasses factors such as housing satisfaction, place attachment, perceived safety, and satisfaction with the neighborhood. Finally, mental health encompasses psychological and subjective well-being.

The first paragraph of this article provides a brief overview the concept of Subj-QOL. Subsequently, a general overview on how research dealt with the concept of Subj-QOL and its most important predictors is provided in the second paragraph. Finally, the research design and the results obtained from the analyses will be presented.

## 2. The subjective quality of life

The literature on the study of QOL traditionally lies in two domains: the examination of objective QOL and the exploration of Subj-QOL. The debate on this dichotomy is extensive (Cummins, 2000; Marans & Stimson, 2011;

McCrea et al., 2005). If the debate on the conceptual evolution of the QOL phenomenon has always been characterized by active participation from the scientific community and a wide body of literature, the subjective component of QOL also poses a significant theoretical challenge in navigating through the many proposals put forward over time. However, despite this extensive debate, the semantic area relevant to the term "subjective" naturally concerns the more individual and personal dimension of individuals. It is not surprising, therefore, that terms such as "subjective quality of life", "subjective well-being", "happiness" and "life satisfaction" are often overlapping in the literature. These are complex terms to define uniquely but can all be attributed to the broader general category related to the subjective well-being of individuals (Rojo-Perez et al., 2015). It is, therefore, a multidimensional construct that encompasses various factors contributing to the individual health of subject (Diener & Lucas, 1999). Camfield and Skevington (2008) suggest, based on a comprehensive analysis of the literature, that Subjective Well-Being (SWB) and Subj-QOL are essentially synonymous. Indeed, the "objective" dimension of QOL is distinct from what is observed in Subj-QOL. Objective QOL refers to factors that contribute to describing the overall well-being of a population in terms of income, environmental quality, housing costs, and so on. This conceptual separation began to be clearer at least since the early 70s, when was recognized that the increases in individuals' wealth conditions did not correspond necessarily to an increase in happiness, subjective satisfaction and social well-being (Campbell et al., 1976). A more substantial and full understanding of Subj-QOL, however, needs a direct data collection of subjective perceptions and evaluations. For this reason, studying Subj-QOL necessarily involves intersecting with the theme of SWB because it entails investigating the mental and existential dimension of individuals rather than socio-economic contextual factors. As mentioned earlier, the interest in studying the field of QOL has transcended the academic sphere for several decades and has become a subject of debate among policymakers. However, what emerges from the results of discussions, especially in the search for a shared definition of QOL, is the need to connect the objective dimension with the subjective one. Starting from early initiatives, such as that of the World Commission on Environment and Development in 1987, the emphasis is placed on the human dimension: "a development capable of satisfying the needs of the present generation without compromising the ability of future generations to satisfy their own needs". Subsequently, in 1994, the World Health Organization proposes a greater emphasis on the individual and subjective dimension, Subj-QOL: "Individual's perception of their position in life in the context of the culture and value system in which they live and in relation to their goals, expectations, standards, and concerns". Finally, the development of a global institution concerned with

keeping the QOL debate alive, "The International Society for Quality of Life Studies" in 1998, suggests an inclusive definition that encompasses all relevant aspects: "Quality of life is both objective and subjective, each axis being the aggregate of seven domains: material well-being, health, productivity, intimacy, safety, community, and emotional well-being. Objective domains comprise culturally relevant measures of objective well-being. Subjective domains comprise domain satisfaction weighted by their importance to the individual". According to this latest definition of QOL, it becomes evident that the subjective component plays a crucial role in the conceptualization of QOL itself. The evolution of the debate on the concept of QOL has contributed to reinforcing the idea that the individuals' well-being passes through, above all, subjective well-being and hence Subj-QOL. The concept of QOL, in the end, now embraces the totality of human life (Cummins, 2000). This is clearly coherent with the basis of contemporary society, where post-materialistic and post-modern values constitute the structure of nowadays societies (Inglehart, 1971). Actually, a look at the surveys conducted by national or international statistical institutes exactly demonstrates this trend. The primary area of interest, alongside the traditional measurements of socio-economic conditions, focuses on Subj-QOL in all its components related to individual well-being. Consider, for example a statistical report introduced by OECD in 2011 for the measurement of social well-being in partner countries of the initiative. It is based on a multi-dimensional framework covering 11 dimensions of current well-being (income and wealth, work and job quality, housing, health, knowledge and skills, environmental quality, work-life balance, social connections, civic engagement, safety and subjective well-being) and four different resources for future well-being (natural, human, economic and social capital). Each edition considers how people's well-being is changing over time and how it is distributed among different population groups, while a range of thematic chapters provide an in-depth look at specific aspects of well-being (OECD, 2011). This example is useful for gaining an understanding of which areas are perceived as more urgent in the study and classification of Subj-QOL from the perspective of policymakers. We can therefore consider that currently, studying Subj-QOL primarily means understanding the degree of subjective well-being. The individual dimension, understanding the effect of various factors on subjectivities, thus constitutes the approach that has been used for several decades in QOL studies.

The most recent developments in research in this field are increasingly focusing on the dimension of subjectivity. Some scholars are attempting to advance the concept of Subj-QOL to emphasize the existential dimension connected to subjective well-being. Skevington and Böhnke (2018) for instance, have tested the "Life Quality and Well-being" (LQW) model as a new

conceptualization that concurrently incorporates aspects related to happiness, satisfaction, and individual well-being in all its facets.

For the purposes of the present article the definition proposed by WHO has been chosen to guide the variables selection:

> An individual's perception of their position in life, in the context of the culture and value systems in which they live, and in relation to their goal, expectations, standards and concerns. It is a broad-ranging concept, incorporating in a complex way the person's physical health, psychological state, level of independence, social relationship, personal beliefs, and relationship to salient features of the environment (The World Health Organization Quality of Life Assessment Group, WHOQOL, 1994, 43).

Based on this definition it is possible to identify certain categories of factors that are universally recognized as influencing Subj-QOL. For this reason, in the research here presented, the aforementioned definition will guide the appropriate selection of variables capable of capturing the relevant constructs based on the available data. Subsequently, if necessary, indicators will be derived from these variables to collectively describe Subj-QOL.

### *2.1 The factors affecting subjective quality of life: a general overview*

Empirical evidence has shown that various factors contribute to influence Subj-QOL: the type of environment, whether natural or built (Marans & Stimson, 2011; Poortinga et al., 2004), the socio-cultural context of life (Kahneman, 1999), psychological conditions (Bradburn, 1969), environmental sustainability conditions (Keles, 2012; Uzzell & Moser, 2006). Additionally, material well-being conditions (Sirgy, 2018) and personal expectations (Donovan & Halpern, 2002). Characteristics of the place of residence (Fried, 1984; Ismail et al., 2015; Moser, 2009; J. M. Sirgy & Cornwell, 2002), neighborhood's features (Sirgy & Cornwell, 2002), place attachment (Arau et al., 2009; Ramkissoon & Mavondo, 2015), personality (Han, 2020; Hayes & Joseph, 2003; Huang et al., 2017; Summerville et al., 2023; Wrosch & Scheier, 2003), education attainment (Edgerton et al., 2012; Winters, 2011) and age (Diener & Eunkook Suh, 1997). Again, the distinction between urban & non-urban environment (Baum & Paulus, 1987; Bechtel & Churchman, 2002; Galea et al., 2005; Marans, 2012; Marans & Stimson, 2011; Mela, 2018; Proshansky, 1978; Stokols, 1978; Vijayakumar & Sangeetha, 2020) and cultural factors (Kim & Kim, 2009; Scott et al., 2008).

The provided evidence comprises instances of factors that have the potential to influence Subj-QOL. Based on this empirical evidence, we can categorize these factors into three overarching groups: elements connected to individuals' physical-material well-being, factors associated with the environmental context of life, and variables related to individual mental well-being, according with the WHOQOL 1994 definition. These three sets of variables encompass fundamental dimensions that can interact with individuals' subjectivity, influencing the extent of their well-being. More specifically, the set of variables included in the analysis will provide information on: material well-being, residential satisfaction, and psychological well-being. As we have seen, these three dimensions are considered variables that influence individuals' quality of life, and they were measured in the research presented here using 12 variables from the ITA.LI survey, as will be explained later. The availability of certain variables in the survey allowed for the construction of indicators to measure the three areas of inquiry for quality of life. This three-dimensional model will provide a substantial, obviously not all-in comprehensive, understanding of the well-being of Italian citizens by considering three fundamental aspects of subjective life.

## 3. Research design

### *3.1. Research questions and dataset*

The research presented here aims to address two questions:

Q1: Can different typology of Subj-QOL being identified in Italian population according to the survey dataset?

Q2: How sociodemographic and territorial factors influence the likelihood to fall into one or another of these Subj-QOL typologies?

To answer to these questions, an analysis has been conducted using data from the ITA.LI survey, also known as "Italian Lives" (IASSC, 2021). ITA.LI is a recently established longitudinal study that includes a probability sample of 4,900 households and 8,778 individuals aged 16 and above, residing in 280 municipalities across Italy. The data collection for the first wave of the survey took place between June 2019 and December 2020. It gathered information on various topics, including education, employment and working conditions, family life and caregiving, wealth, health, well-being, housing, and residential mobility. The data presented in this analysis specifically pertain to the first wave of the survey, indicating that this analysis should be considered cross-sectional in nature. The implementation of the survey involved the establishment of a four-level multi-stage sampling, encompassing municipality, street, building,

and households. Due to this complex sampling methodology, the research team has followed an elaborate technique to properly implement the statistical models. The "Balanced Repeated Replication" (BRR) methodology, used to correct the estimates, and the description of the survey's quality profile are discussed in the dedicated documents (Lucchini et al., 2023; Pisati, 2023).

The data analysis process consists of three phases. In the first phase, descriptive statistics of the Subj-QOL indicators used in the study are provided, along with frequency distributions of sociodemographic variables related to the sample of Italian citizens involved in the survey. In the second phase, the Subj-QOL indicators undergo a cluster analysis (k-means method) aimed at identifying typologies of Subj-QOL at the national level, for answering at the Q1. Finally, in the third and final phase, the final cluster centers from the previous analysis are transformed into a multinomial dependent variable with three categories (corresponding to each of the identified clusters) and included into a multinomial logistic regression model. The purpose of this last step of analysis is to determine the probability of falling into a specific cluster of Subj-QOL based on specific territorial characteristics (urbanization level of the municipality of origin and geographical area) and sociodemographic factors (age, gender, level of education). This is an exploratory analysis approach which aims to answer to the Q2.

### *3.2. Data analysis*

#### *3.2.1. Sociodemographic distribution frequency*

In the table 1, the frequency distributions of the analyzed sample can be observed. As can be seen, over 80% of respondents live in urbanized areas of large or medium size, while only 16.3% reside in rural or small areas. The breakdown between males (48.1%) and females (51.9%) shows a slight prevalence for the latter gender. The age of the respondents has been grouped following a generational approach. Empirical evidence highlights how levels of Subj-QOL and, more in general SWB, vary over generations (Kim & Kim, 2009; Scott et al., 2008), since each of them are characterized by distinct values, lifestyles, worldviews, and cultural foundations (Mannheim, 1952; Mead, 1970). For this reason, in order to highlight the value-based distinctions among different individuals, a generation-led approach has been used instead of using the simple variable "age". The reason is to better highlights how individuals fall into a certain typology of Subj-QOL and how the generation influence the likelihood to fall into a cluster instead of another. The concept of generation has been a subject of debate among sociologists since at least the 1990s, with

influential works like Douglas Coupland's "Generation X" (1991). However, it's important to note that the scholarly debate often gets conflated with more journalistic, non-academic discussions, resulting in varying labels for generations based on differing opinions regarding their starting and ending years. The recategorized age variable of the respondents presents a potential breakdown by generation, including the "Silent Generation" (Lehto et al., 2008), "Baby Boomers" (Kupperschmidt, 2000; Strauss & Howe, 1991), "Generation X" (Howe & Strauss, 1993), "Millennials" or "Generation Y" (Tapscott, 1998), and "Generation Z" (Schroth, 2019). The "Silent Generation" class makes up a marginal share of the sample (13.8%) and is followed by "Generation X" (28.9%), then equally followed by "Baby Boomers," (28.8%), "Millennials" (20.3%), and finally "Generation Z" (8.2%). Regarding the geographical distribution of respondents, 46.5% reside in Northern Italy, 19.7% in Central Italy, and 33.8% in the Islands and Southern Italy. Lastly, regarding the level of education, 42.8% of the sample have a basic education (elementary and middle school diploma), while 38.9% hold a high school degree. 15.5% have a university degree, and only 2.8% do not possess any educational qualifications.

*Table 1. Sociodemographic distribution frequency (N=8,778; Pop. Size=50,192,596).*

| ***Variable*** | ***Modalities*** | ***%*** | ***se*** | ***lb*** | ***ub*** |
|---|---|---|---|---|---|
| Degree of urbanization | Big City | 36.3 | 1.0 | 34.4 | 38.3 |
| | Medium-sized city | 47.3 | 1.3 | 44.7 | 49.9 |
| | Small city | 16.3 | 1.0 | 14.5 | 18.4 |
| Sex | Males | 48.1 | 0.1 | 47.9 | 48.3 |
| | Females | 51.9 | 0.1 | 51.7 | 52.1 |
| Age | Silent Gen (1921-1945) | 13.8 | 0.2 | 13.5 | 14.1 |
| | Baby Boomers (1946-1964) | 28.8 | 0.1 | 28.6 | 29.1 |
| | Gen X (1965-1980) | 28.9 | 0.2 | 28.6 | 29.2 |
| | Gen Y - Millennials (1981-1996) | 20.3 | 0.2 | 19.8 | 20.7 |
| | Gen Z (1997-2012) | 8.2 | 0.2 | 7.9 | 8.6 |
| Geographic Area | Northern Italy | 46.5 | 0.3 | 45.9 | 47.1 |
| | Central Italy | 19.7 | 0.3 | 19.2 | 20.2 |
| | Southern Italy/Islands | 33.8 | 0.3 | 33.3 | 34.4 |
| Level of education | Without Education | 2.8 | 0.1 | 2.6 | 3.0 |
| | Lower Education | 42.8 | 0.2 | 42.5 | 43.1 |
| | High School Diploma | 38.9 | 0.1 | 38.7 | 39.2 |
| | University Degree | 15.5 | 0.1 | 15.4 | 15.6 |

Note: s.e.=standard error of cell percentage, lb= Lower 95% confidence bound for cell percentage, ub = Upper 95% confidence bound for cell percentage

### *3.2.2.* Subj-QOL *indicators: descriptive statistics*

As mentioned earlier, the Subj-QOL here presented has been inspired by the WHOQOL (1994) definition. The choice of indicators will focus on the following domains:

-material well-being;
-residential satisfaction;
-psychological well-being.

It is clear that this is a sort of simplification of such a complex and multidimensional concept, but for the general purpose of the research here presented and given the availability of data, a definition which takes into account the most important life's aspect, such as physical, living and psychological dimensions, should encompasses the most important areas of well-being for individuals, giving an adequate account of the Subj-QOL. A total of 12 variables has been identified or calculated, which they had been inserted into the cluster analysis model with the aim to regroup individual cases based on these variables and finally extracting the Subj-QOL clusters. All the 12 variables had been categorized in three groups, which represents the three-dimensional concept of Subj-QOL based on the WHOQOL, 1994 definition.

Based on the available data, these three dimensions have been operationalized as follows. Regarding the first component, material well-being, it was measured using three variables: the "Housing Satisfaction Index" (measure of the material condition of the house) scale 0-10, ranging from "not satisfied at all" to "fully satisfied", self-perceived health index (scale 1-5, ranging from "poor" to "excellent"), and satisfaction with family financial condition (scale 0-10, ranging from "not satisfied at all" to "fully satisfied"). The first index reflects a rather high value (mean=7.81, sd=0.04), the second index is similarly positive (mean=3.76, sd=0.01), and the third index is moderately high (mean=7.00, sd=0.04). These results indicate, on average, a rather positive condition of quality of life in its material component for Italian citizens.

Regarding the second dimension of quality of life, which is the well-being related to the living environment, three indicators were measured to describe individuals' relationship with their living context: place attachment (scale 1-7, ranging from "Completely disagree" to "Completely agree"), neighborhood satisfaction (scale 0-10, ranging from "not satisfied at all" to "fully satisfied"), and perceived safety level (scale 1-7, ranging from "Completely disagree" to "Completely agree"). These three variables were constructed using validated scales in the field of environmental psychology (Fornara et al., 2010) aimed at measuring the quality perceived of urban environments within a "socio-physical" perspective (Stokols & Altman, 1987).

The first indicator, related to place attachment, showed a moderately positive value (mean=5.21, sd=0.03). The indicator measuring neighborhood satisfaction yielded a relatively high level (mean=7.70, sd=0.03). Finally, the indicator measuring perceived safety in the neighborhood recorded a satisfactory value (mean=5.30, sd=0.04). The overall picture indicates a good level of satisfaction with the living context, although in terms of safety, the average values are only sufficient and considered critical at the national level.

Finally, the last category of variables describes the psychological well-being.

*Table 2. Descriptive Statistics of indicators of Subj-QOL (N=8,504, Pop. Size= 48,697,052).*

| ***Category*** | ***Variable*** | ***Mean*** | ***Std. dev.*** | ***Min*** | ***Max*** |
|---|---|---|---|---|---|
| Material well-being | Housing Satisfaction Index | 7.81 | 0.04 | 0 | 10 |
| | Self-reported health | 3.76 | 0.01 | 1 | 5 |
| | Satisfaction on family financial situation | 7.00 | 0.04 | 0 | 10 |
| Residential well-being | Place attachment | 5.21 | 0.03 | 1 | 7 |
| | Neighborhood satisfaction | 7.70 | 0.03 | 1 | 7 |
| | Safety perceived | 5.30 | 0.04 | 1 | 7 |
| Psychological well-being | Openness | 3.55 | 0.02 | 1 | 5 |
| | Conscientiousness | 3.76 | 0.01 | 1 | 5 |
| | Agreeableness | 3.62 | 0.17 | 1 | 5 |
| | Neuroticism | 3.00 | 0.01 | 1 | 5 |
| | Extraversion | 3.60 | 0.01 | 1 | 5 |
| | Overall life satisfaction | 7.31 | 0.04 | 0 | 10 |

The operationalization of this dimension of Subj-QOL has followed two ideas, on the one hand to exploit the opportunity given by the dataset to use a battery of item related to personality traits (a good source of information on the behavioral and inner features of individuals') and on the other hand to use the variable related to overall life satisfaction. In this sense, this information allow to give a good account of the general characteristics of psychological well-being of the survey's participants. Personality traits were collected by the ITA.LI research team by administering a battery based on 15 items (5-point scale) (Hahn et al., 2012; Lang et al., 2011). For the purposes of the research presented in this article, these items were then subjected to PCA analysis (KMO=0.80, Bartlett's sphericity test $p < 0.001$) in order to extract the five factors that determine the so-called "big five" personality traits. The indicators for each trait were then calculated based on the methodology proposed by Hahn et al. (2012) and Lang et al. (2011). The means for each level of personality trait are shown in tab. 2 In general, from the results obtained regarding personality traits, it can be observed that in all five dimensions, values are concentrated towards the higher end of the Likert measurement scales used, except for the "neuroticism"

trait, which shows a central value. Lastly, the final indicator used to complete the individual psychological well-being dimension was the variable related to overall life satisfaction, already collected by the ITA-LI survey (Likert scale 0-10, ranging from "not satisfied at all" to "fully satisfied"), which registered a moderately high value (mean=7.31, sd=0.04).

Before proceeding with the next research steps, the 12 metric variables were subjected to a correlation analysis to identify potential associations among them. The correlation analysis between these variables did not show any potential critical level.

### *3.2.3. Cluster analysis*

The second phase of data analysis involved a cluster analysis using the 12 variables outlined in Table 2 with the aim to identify distinct quality of life profiles at the national level. The objective of this analytical step was to answer to the research question Q1. In order to facilitate comparability, the quantitative variables of interest in Tab. 2 were standardized using z-scores. Subsequently, a cluster analysis model utilizing the "k-means" methodology, suitable for quantitative variables (Everitt et al., 2011), was carried out. The resulting 3-cluster model demonstrated the greatest coherence and effectiveness in visually representing the diverse types of national quality of life (this model was achieved after 38 iterations). For this reason, the 3-clusters model has been preferred as suitable for the research goals. The software utilized for this step of analysis was SPSS®29.

*Table 3. Cluster Analysis (k-means). Final cluster centers.*

| | *Socially Isolated* | *High Subj-QOL* | *Socially Vulnerable* |
|---|---|---|---|
| Housing Satisfaction Index | .09 | .50 | -1.20 |
| Self-reported health | -.18 | .24 | -.18 |
| Satisfaction on family financial situation | .02 | .45 | -.96 |
| Place attachment | .03 | .43 | -.92 |
| Neighborhood satisfaction | .08 | .51 | -1.19 |
| Safety perceived | -.04 | .40 | -.75 |
| Openness | -.54 | .46 | -.01 |
| Conscientiousness | -.52 | .54 | -.20 |
| Agreeableness | -.56 | .54 | -.14 |
| Neuroticism | .11 | -.25 | .32 |
| Extraversion | -.60 | .50 | -.01 |
| Overall life satisfaction | -.02 | .48 | -.95 |
| % | 36.0 | 43.0 | 21.0 |
| N | 2989 | 3723 | 1792 |

Based on the analysis of the final cluster centers, three group categorizations can be proposed: 'Socially Isolated,' (N=2,989), 'High Subj-QOL,' (N=3,723) and 'Socially Vulnerable' (N=1,792).

Describing each of the groups identified through the cluster analysis, the first group, labeled as "Socially Isolated," comprises individuals who exhibit various psychological and social characteristics indicative of a living condition that falls below the mean of the overall sample. This group encompasses aspects related to the psychological domain, such as life satisfaction, attachment, and personality traits. Notably, they demonstrate an above-average level of neuroticism, which is associated with anxiety and stress. On the other hand, their material well-being, as indicated by housing satisfaction and financial satisfaction, surpasses the mean. However, their "self-reported health indicator" reveals a score below the mean, suggesting that this group reports lower levels of psychological and health standards.

The second group, "High Subj-QOL," describes a population of Italians who, on average, enjoy high-standard living conditions in all aspects, both material and psychological. The cluster analysis has facilitated the grouping of similar cases based on the variables included in the model. However, to gain further insight into the spatial and sociodemographic characteristics of these individuals, an analytical methodology that considers specific social control variables is necessary to study the probability of encountering these three groups.

Lastly, the third and final cluster "Socially vulnerable," consists of Italian citizens who experience precarious material and psychosocial conditions. Notably, the housing quality is significantly below average, indicating an unstable living environment for these individuals. Other parameters examined in the cluster analysis also show below-average values, including life satisfaction, attachment to the place of residence, and personality traits. It is worth mentioning that positive traits such as openness, extroversion, and conscientiousness are nearly absent within this group.

### *3.2.4. Multinomial logistic regression*

The third and last step of data analysis process involved a logistic multinomial regression model to answer to the research question Q2. For this step of analysis, software STATA® (version 18) has been employed. In order to answer Q2, the final centers from the previous cluster analysis were used as the dependent variable in the multinomial logistic model. This dependent variable represents three typology of Subj-QOL, which comprises three categories, each corresponding to one of the identified clusters. The aim of the analysis is to

investigate the strength of the association between territorial and sociodemographic variables and the categorical dependent variable. Given the logistic nature of the model, the objective is to estimate the probability of belonging to each Subj-QOL category based on the independent variables included in the model. In this regard, the estimated probability is expressed through the odds ratio, which indicates the likelihood of falling into a given category, comparing to a reference category, according to the two group of independent variables The independent variables included in the model were degree of urbanization, sex, generation, geographic area, and educational level, all treated as categorical variables. The main objective of this analysis was to examine the influence of a group of sociodemographic and territorial variables in influencing the likelihood to fall into a certain cluster of quality of life instead of another. The analysis compared the "Socially Isolated" and "Socially Vulnerable" clusters by using "High Subj-QOL" cluster, as reference category; so it is important to consider this logical premise when interpreting the odds ratios. In order to verify whether existing a collinearity between variables, a VIF test has been performed by running a preliminary linear regression. The mean of VIF obtained was low (2.21), which means that no issues of multicollinearity are detected among the independent variables, suggesting that there are no significant concerns regarding multicollinearity in the multinomial logistic regression (MLM) model as well.

In addition, a more robust confirming test of estimations has been performed by running a bootstrapping procedure (1000 replications), confirming the robustness of the estimated coefficients, with confidence intervals not crossing zero and relatively low standard errors, indicating that the model's estimates are stable and not influenced by random data perturbations, thus suggesting that multicollinearity is not a significant issue. Basing on these premises, the estimated odds ratio appears to be solid to make analytical interpretations.

The "Socially Isolated" group primarily consists of individuals residing in urban areas when compared to the high quality of life group. People living in large cities have a 1.16 times higher likelihood of belonging to the social isolation cluster instead of the high quality of life cluster. Similarly, individuals residing in medium-sized cities have a slightly higher probability of being part of the same group (OR=1.043). Geographically, individuals in Central Italy and Northern Italy have nearly equal chances of falling into this cluster, being 1.5 times more likely than those in Southern Italy to experience social isolation rather than high quality of life. Men are significantly more likely than women to belong to this cluster, and as educational qualifications increase, the probability of experiencing social isolation decreases. Older age cohorts have a lower likelihood of experiencing social isolation compared to the "Generation Z"

cohort. Education level acts as protective factor from falling into social isolated cluster.

*Table 4. Logistic Multinomial Regression (N=8,504).*

| *Dep. Var.: Number of cases in cluster (Ref. Category: High Subj-QOL)* | *Odds Ratio* |
|---|---|
| **Socially Isolated** | |
| *Degree of urbanization (Ref. Small City)* | |
| Big city | 1.163 [ 0.858,1.575] |
| Medium-sized City | 1.043 [0.744,1.463] |
| *Sex (Ref. Females)* | |
| Males | 1.480*** [1.329,1.648] |
| *Generation (Ref. Gen Z 1997-2012)* | |
| Silent Gen (1921-1945) | 1.088 [0.783,1.513] |
| Baby Boomers (1946-1964) | 0.883 [0.672,1.160] |
| Gen X (1965-1980 | 0.824 [0.633,1.072] |
| Gen Y - Millennials (1981-1996) | 0.764* [0.595,0.980] |
| *Geographic Area (Ref. Southern Italy)* | |
| Northern Italy | 1.499** [1.117,2.013] |
| Central Italy | 1.528* [1.045,2.233] |
| *Education Level (Ref. University Degree)* | |
| Without Education | 4.393*** [2.640,7.309] |
| Lower education | 2.829*** [2.279,3.511] |
| High School Diploma | 1.632*** [1.296,2.055] |
| **Socially Vulnerable** | |
| *Degree of urbanization (Ref. Small Cities)* | |
| Big cities | 2.743*** [1.726,4.360] |
| Medium-sized Cities | 1.410 [0.876,2.271] |
| *Sex (Ref. Females)* | |
| Males | 0.967 [0.836,1.120] |
| *Age (Ref. Gen Z 1997-2012)* | |
| Silent Gen (1921-1945) | 0.613** [0.433,0.869] |
| Baby Boomers (1946-1964) | 0.887 [0.675,1.166] |
| Gen X (1965-1980 | 1.117 [0.864,1.446] |
| Gen Y - Millennials (1981-1996) | 1.108 [0.846,1.450] |
| *Geographic Area (Ref. Southern Italy)* | |
| Northern Italy | 0.867 [0.639,1.176] |
| Central Italy | 1.356 [0.941,1.954] |
| *Education Level (Ref. University Degree)* | |
| Without Education | 8.345*** [4.612,15.10] |
| Lower education | 3.608*** [2.819,4.617] |
| High School Diploma | 1.680*** [1.398,2.018] |
| *N* | 8504 |

Exponentiated coefficients; 95% confidence intervals in brackets.
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

As for the second category, "Socially Vulnerable" a similar pattern is observed where urban settings are more likely to belong to this group compared

to high quality of life cases. Individuals living in large urban centers have a 2.84 times higher likelihood than those in small municipalities to be vulnerable. Similarly, individuals residing in medium-sized cities have a 1.44 times higher probability of being part of this group compared to residents of small cities. This phenomenon seems to predominantly affect the southern parts of the country, with some impact in Central Italy, while Northern Italy appears to be less affected. In contrast to the previous category, as the age of the sample increases, the protective factor decreases, and the population of Millennials, compared to Gen Z, has a marginal probability (OR=1.10) of falling into a condition of social vulnerability instead of high quality of life. However, the lack of significance in the estimate prevents us from inferring this result at the national level; it only provides insights into understanding the phenomenon. Similarly to the previous group, higher levels of education act as a protective factor. Individuals with no education face a higher risk of experiencing social vulnerability rather than high quality of life compared to those with a college degree.

## 4. Discussion

Cluster analysis has shown the existence of three distinct typology of Subj-QOL in Italy, each grouping individuals experiencing different experiences in the subjective condition. The analysis of the final cluster centers for each group identified by the clustering model clearly highlights which variables related to Subj-QOL are prevalent in each. For example, the group of citizens experiencing social isolation (cluster 1) tends to have a predominantly neurotic personality trait, along with low levels of material and residential well-being. The most relevant evidence taken out from this cluster are the very low levels of positive traits measured on the "big 5" personality traits. This result confirms the association between personal traits and SWB/Subj-QOL (Costa & McCrae, 1980; Hayes & Joseph, 2003; Libràn, 2006; Wrosch & Scheier, 2003).

On the other hand, citizens enjoying high well-being levels show a prevalence of high values across all three dimensions considered for measuring Subj-QOL. This is a result quite logical which confirms how in the contemporary approach to conceptualization of Subj-QOL the simultaneous role played by material, psychological and housing/residential variables, considered tied by each other's, is crucial to give an account of the level of Subj-QOL in modern societies. Conversely, the citizens falling into the cluster of social vulnerability exhibit very low levels across all three dimensions of Subj-QOL, especially concerning material and residential well-being. Finally, the

cluster analysis approach granted the possibility to answer to the Q1, showing off the different ways in which Subj-QOL can take shape in the Italian society.

The multinomial logistic model facilitated additional exploration, probing the impact of sociodemographic variables on individuals' life trajectories and their likelihood of falling into one of the identified three Subj-QOL's clusters. The model focused on the two most critical clusters: the groups experiencing social isolation or vulnerability referenced to the prevalent group of individuals enjoying high Subj-QOL level. Sociodemographic variables that demonstrated a protective effect included education attainment, confirming what already highlighted in the literature (Edgerton et al., 2012; Winters, 2011), older age groups, especially for socially isolated individuals. Age should be related to the generational difference between cohorts of individuals who have benefited from better economic conditions than later generations. This differential may have influenced the outcome of the model by going on to confirm the idea that socio-economic opportunities between historical phases occur differently and generations may benefit in certain circumstances but not in others (Diener & Eunkook Suh, 1997; Horley & Lavery, 1995; Layte et al., 2013; Walker, 2005). Geographical background turns out to be another relevant variable that can act as a protective factor for having a higher or lower probability of falling into a positive or negative Subj-QOL cluster. Our results confirm the relationship between geographic home context and Subj-QOL (Brethel-Haurwitz & Marsh, 2014; Morris, 2019; Su et al., 2023). For example, social isolation is more likely to occur in northern or central regions of Italy compared to southern regions. Cultural elements or lifestyle customs associated with these contexts, which are more focused on sociability and collective solidarity, may play a role here (Kim & Kim, 2009; Scott et al., 2008). In terms of the likelihood of experiencing social vulnerability, cases from southern Italian regions showed a higher risk compared to those living in the northern areas of the country. This factor might be linked to the longstanding economic and employment disparities that have affected Italy between its northern and southern regions for decades (Abramo et al., 2016; Leydesdorff & Cucco, 2019; Rizzo, 2016).

Those who reported living in urban areas were more likely to experience social isolation or vulnerability compared to individuals residing in medium-sized or small municipalities. This finding confirms the well-established literature on the paradox of cities, whereby despite offering greater opportunities than other forms of human settlement, they also present multiple challenges to individuals' Subj-QOL (Baum & Paulus, 1987; Bechtel & Churchman, 2002; Galea et al., 2005; Marans, 2012; Marans & Stimson, 2011; Mela, 2018; Proshansky, 1978; Stokols, 1978; Vijayakumar & Sangeetha, 2020).

The multinomial model allowed to show how both sociodemographic and territorial variables could affect the likelihood to fall into certain categories of

Subj-QOL in Italy by confirming some tendencies already highlighted by a wide body of literature. This model did not aim to draw causal conclusions, but to give a first glance at the potential different typology of Subj-QOL existing in a nation and how sociodemographic and territorial variables could influence the individuals' biographies.

## 5. Conclusions

This article presents a first outlook of subjective quality of life (Subj-QOL) in Italy by using the new dataset coming from the Italian survey ITA.LI, a longitudinal study on social transformations. The research path here presented constitutes an exploratory study and with this in mind should be framed; no causal conclusions will be drawn with the outputs produced. By keeping in mind the wide and multidecadal debate on Subj-QOL and its overlapping with other concepts (such as "subjective well-being"), has been chosen to refer to the definition proposed by "World Health Organization Quality of Life Assessment Group" (1994). The conceptualization here proposed take into account the most important dimensions related to the subjective quality of life of a human being: the material well-being (related to the individual health, the housing satisfaction and the financial satisfaction), the residential satisfaction (place attachment, neighborhood satisfaction and safety perceived of the living place) and the psychological well-being ("big five" traits of personality and overall life satisfaction). It is clear that this is a sort of simplification of such a complex and multidimensional concept, but for the general purpose of the research here presented and the actual availability of data, a definition which takes into account the most important life's aspect, such as physical, living and psychological dimensions, encompasses the most important areas of well-being for individuals, giving an adequate account of the Subj-QOL.

A specific selection of variables has been performed according to the definition of Subj-QOL proposed. The complex system of sampling correction and application of weights makes the survey results generalizable to the national population. This means that the national representativeness of the sample, along with the robustness of the models' estimations, allow a general inference to the Italian's society situation, even though with a cross-sectional approach to the phenomenon instead of a longitudinal one. The results of the analysis will give a good account of the actual Italian situation, but they do not offer the possibility do draw causal conclusions of any kind. This analysis enables a snapshot of the current state of the country's health in terms of Subj-QOL a dimension typically challenging to capture compared to traditional Quality of Life (QOL) based on so-called "objective" indicators and focused on socio-

economic well-being. The long tradition of studies on QOL has gradually led to a convergence on the evident distinction that the dual nature of the concept of quality of life assumes in research: objective quality of life and subjective quality of life. In this study, we focused on the latter research stream, accepting the idea proposed by Camfield and Skevington (2008) that there is a substantial overlap between Subj-QOL and subjective well-being (SWB). The core of the study remains the degree of satisfaction and happiness of individuals, detectable exclusively through sample surveys.

The cluster analysis has shed light on the complexity which might take the significance of Subj-QOL in a country's society. In the research, three cluster of Subj-QOL have been identified, one related to those "Socially Isolated", "High Subj-QOL" and "Socially Vulnerable". The narrative provided at the public level regarding the rankings of QOL for cities, regions, and nations is evidently a limited contribution to a deeper understanding of the actual living conditions of the citizens of a country. The rankings and aggregated indicators indeed provide a snapshot that tends to flatten differences, effectively presenting a homogeneous image of a national QOL. The analyses proposed here offer a different perspective on the phenomenon, demonstrating how the issue of individuals' QOL is extremely dynamic and complex. This is an initial analysis from a longitudinal study, which enables the observation of potential changes in social dynamics, including quality of life, over time. If on the one hand, the mainstream QOL rankings are probably useful for a *prêt-à-porter* and very simplified account of the quality of living of a place, on the other hand a more scientific and deeper analysis of what is actually going on within the individual subjectivities, opens-up a new scenario in which not only the mainstream approach to QOL results absolutely insufficient, but several political interrogatives comes up. As mentioned, subjective quality of life and objective one should go hand in hand in order to give a better account of the status-of-health of a city, region and nation. The sociodemographic variables and the territorial variables have shown to possess the ability to influence the likelihood of falling into one or another group of Subj-QOL. Sociodemographic characteristics, particularly age group and level of education, as well as the type of territorial context of life (large cities versus small municipalities) and geographical origin, have demonstrated a strong ability to influence the well-being outcome in the studied sample. The results presented in the article constitute an initial outcome of the results which can be potentially drawn by using the survey ITA.LI. To make a more robust and possibly causal-driven analysis, there will be need for the next longitudinal data coming from the next wave, which is underway. Once this process will be completed, it will be possible to continue this analysis, considering the time elapsed between the two surveys, and appreciating any changes in subjective quality of life levels while

examining causal relationships between the variables considered. This will provide more solid and effective tracking of the evolution of the phenomenon of Subj-QOL in Italy, drawing more robust conclusions about what has been already identified in this first step of the research.

## References

Abramo, G., D'Angelo, C. A., & Rosati, F. (2016). The north–south divide in the Italian higher education system. *Scientometrics*, 109(3), 2093–2117. https://doi.org/10.1007/s11192-016-2141-9

Arau, J., Joa, M., Pereira, F., & Perna, A. (2009). "Are you happy here ?": the relationship between quality of life and place attachment. *Journal of Place Management and Development*, 9–10. https://doi.org/10.1108/JPMD-06-2012-0017

Baum, A., & Paulus, P. B. (1987). Crowding. In D. Stokols & I. Altman (Eds.), *Handbook of environmental psychology* (pp. 533–570). New York: Wiley-Interscience.

Bechtel, R. B., & Churchman, A. (2002). *Handbook Of Environmental Psychology*. New York: Wiley. https://doi.org/10.1016/0307-904X(80)90124-9

Bradburn, N. (1969). *The Structure of Psychological Well-Being*. Chicago: Aldine.

Brethel-Haurwitz, K. M., & Marsh, A. A. (2014). Geographical Differences in Subjective Well-Being Predict Extraordinary Altruism. *Psychological Science*, 25(3), 762–771. https://doi.org/10.1177/0956797613516148

Camfield, L., & Skevington, S. M. (2008). On subjective well-being and quality of life. *Journal of Health Psychology*, 13(6), 764–775. https://doi.org/10.1177/1359105308093860

Campbell, A., Converse, R., & Rodgers, W. (1976). *The quality of American life: Perceptions, evaluations and satisfactions*. New York: Russell Sage Foundation.

Costa, P. T., & McCrae, R. R. (1980). Influence of extraversion and neuroticism on subjective well-being: Happy and unhappy people. *Journal of Personality and Social Psychology*, 38(4), 668–678.

Coupland, D. (1991). *Generation X: Tales for an Accelerated Culture*. New York: St. Martin's Press.

Cummins, R. A. (2000). Objective and subjective quality of life: An interactive model. *Social Indicators Research*, 52(1), 55–72. https://doi.org/10.1023/A:1007027822521

Diener, E., & Eunkook Suh, M. (1997). Subjective Well-Being and Age: An International Analysis. *Annual Review of Gerontology and Geriatrics*, 17(1), 304–324.

Diener, E., & Lucas, R. E. (1999). Personality and subjective well-being. In D.

Kahneman, E. Diener, & N. Schwarza (Eds.), *Well-being: The foundations of hedonic psychology* (pp. 213–229). New York: Russell Sage.

Donovan, N., & Halpern, D. (2002). *Life satisfaction: the state of knowledge and implications for government*. Cabinet Office Prime Minister's Strategy Unit.

Edgerton, J. D., Roberts, L. W., & Von Below, S. (2012). Education and Quality of Life. In K. C. Land, A. C. Michalos, & J. M. Stirgy (Eds.), *Handbook of Social Indicators and Quality of Life Research* (pp. 265–296). New York: Springer.

Everitt, B. S., Landau, S., & Leese, M. (2011). *Cluster Analysis*. Chichester: Wiley.

Fornara, F., Bonaiuto, M., & Bonnes, M. (2010). *Indicatori di qualità urbana residenziale percepita (IQURP). Manuale d'uso di scale psicometriche per scopi di ricerca e applicativi*. Milano: Franco Angeli.

Fried, M. (1984). The structure and significance of community satisfaction. *Population and Environment*, 7(2), 61–86. https://doi.org/10.1007/BF01254778

Galea, S., Ahern, J., Rudenstine, S., Wallace, Z., & Vlahov, D. (2005). Urban built environment and depression: A multilevel analysis. *Journal of Epidemiology and Community Health*, 59(10), 822–827. https://doi.org/10.1136/jech.2005.033084.

Hahn, E., Gottschling, J., & Spinath, F. M. (2012). Short measurements of personality - Validity and reliability of the GSOEP Big Five Inventory (BFI-S). *Journal of Research in Personality*, 46(3), 355–359. https://doi.org/10.1016/j.jrp.2012.03.008

Han, J. H. (2020). The effects of personality traits on subjective well-being and behavioral intention associated with serious leisure experiences. *Journal of Asian Finance, Economics and Business*, 7(5), 167–176. https://doi.org/10.13106/JAFEB.2020.VOL7.NO5.167

Hayes, N., & Joseph, S. (2003). Big 5 correlates of three measures of subjective well-being. *Personality and Individual Differences*, 34(4), 723–727. https://doi.org/10.1016/S0191-8869(02)00057-0

Horley, J., & Lavery, J. J. (1995). Subjective well-being and age. *Social Indicators Research*, 34(2), 275–282. https://doi.org/10.1007/BF01079200

Howe, N., & Strauss, W. (1993). *13th gen: Abort, Rety, Ignore, Fail*. New York: Vintage Books.

Huang, I. C., Lee, J. L., Ketheeswaran, P., Jones, C. M., Revicki, D. A., & Wu, A. W. (2017). Does personality affect health-related quality of life? A systematic review. In *PLoS ONE*, 12(3), 1-31. https://doi.org/10.1371/journal.pone.0173806

IASSC. (2021). *Italian Lives - ITA.LI. UNiData*, Milano: Bicocca Data Archive. https://doi.org/10.20366/unimib/unidata/SN236-1.0

Inglehart, R. (1971). The silent revolution in Europe: Intergenerational change

in post-industrial societies. *American Political Science Review*, 65(4), 991–1017.

Ismail, F., Jabar, I. L., Janipha, N. A. I., & Razali, R. (2015). Measuring the Quality of Life in Low Cost Residential Environment. *Procedia - Social and Behavioral Sciences*, 168, 270–279. https://doi.org/10.1016/j.sbspro.2014.10.232

Kahneman, D. (1999). Objective happiness. In D. Kahneman, E. Diener, & N. Schwarz (Eds.), *Well-being: The foundations of hedonic psychology* (pp. 3–25). New York: Russell Sage Foundation.

Keles, R. (2012). The Quality of Life and the Environment. *Procedia - Social and Behavioral Sciences*, 35(December 2011), 23–32. https://doi.org/10.1016/j.sbspro.2012.02.059

Kim, S., & Kim, H. (2009). Does cultural capital matter? Cultural divide and quality of life. *Social Indicators Research*, 93(2), 295–313. https://doi.org/10.1007/s11205-008-9318-4

Kupperschmidt, B. R. (2000). Multigenerational Employees: Strategies for Effective Management. *Health Care Manager*, 19, 65–76.

Lang, F. R., John, D., Lüdtke, O., Schupp, J., & Wagner, G. G. (2011). Short assessment of the Big Five: Robust across survey methods except telephone interviewing. *Behavior Research Methods*, 43(2), 548–567. https://doi.org/10.3758/s13428-011-0066-z

Layte, R., Sexton, E., & Savva, G. (2013). Quality of life in older age: evidence from an Irish cohort study. *Journal of the American Geriatrics Society*, 61, 299–305. https://doi.org/10.1111/jgs.12198. PMID: 23662722.

Lehto, X. Y., Jang, S. C. (Shawn), Achana, F. T., & O'Leary, J. T. (2008). Exploring tourism experience sought: A cohort comparison of Baby Boomers and the Silent Generation. *Journal of Vacation Marketing*, 14(3), 237–252. https://doi.org/10.1177/1356766708090585

Leydesdorff, L., & Cucco, I. (2019). Regions, innovation systems, and the North-South divide in Italy. *Profesional de La Informacion*, 28(2), 1–36. https://doi.org/10.3145/epi.2019.mar.14

Libràn, E. (2006). Personality Dimensions and Subjective Well-Being. *The Spanish Journal of Psychology*, 9(1), 38–44.

Lucchini, M., Argentin, G., Bussi, D., Consolazio, D., Giovanna, D. S., Gerosa, T., Guidi, G., Negrelli, S., Piazzoni, C., Pisati, M., Respi, C., Riva, E., Sala, E., Scisci, D., & Terraneo, M. (2023). *Quality Profile. Questionnaires, Fieldwork, and Data Preparation*. Milano: Institute for Advanced Study of Social Change.

Mannheim, K. (1952). *Essays on the Sociology of Knowledge*. London: Routledge & Kegan Paul.

Marans, R. W. (2012). Quality of Urban Life Studies: An Overview and

Implications for Environment-Behaviour Research. *Procedia - Social and Behavioral Sciences,* 35(December 2011), 9–22. https://doi.org/10.1016/j.sbspro.2012.02.058

Marans, R. W., & Stimson, R. J. (2011). *Investigating Quality of urban life: Theory, method, and empirical research*. Dordrecht: Springer.

McCrea, R., Stimson, R., & Western, J. (2005). Testing a moderated model of satisfaction with urban living using data for Brisbane-South East Queensland, Australia. *Social Indicators Research*, 72(2), 121–152. https://doi.org/10.1007/s11205-004-2211-x

Mead, M. (1970). *Culture and Commitment: A Study of the Generation Gap*. New York: Garden City.

Mela, A. (2018). *Sociologia delle città*. Roma: Carocci.

Morris, E. A. (2019). Do cities or suburbs offer higher quality of life? Intrametropolitan location, activity patterns, access, and subjective well-being. *Cities*, 89(February), 228–242. https://doi.org/10.1016/j.cities.2019.02.012

Moser, G. (2009). Quality of life and sustainability: Toward person-environment congruity. *Journal of Environmental Psychology*, 29(3), 351–357. https://doi.org/10.1016/j.jenvp.2009.02.002

OECD. (2011). *How's Life? Measuring Well-being*.

Pisati, M. (2023). *The Italian Lives Survey. Sample Design, Weighting, Variance Estimation, and Data Analysis*. Milano: Institute for Advanced Study of Social Change.

Poortinga, W., Steg, L., & Vlek, C. (2004). Values, environmental concern and environmental behavior: a study into household energy use. *Environment and Behavior*, 36, 70–93.

Proshansky, H. M. (1978). The City And Self-Identity. *Environment & Behavior,* 10(2), 147–169. http://journals.sagepub.com/doi/pdf/10.1177/0013916578102002

Ramkissoon, H., & Mavondo, F. T. (2015). The satisfaction-place attachment relationship: Potential mediators and moderators. *Journal of Business Research*, 68(12), 2593–2602. https://doi.org/10.1016/j.jbusres.2015.05.002

Rizzo, A. (2016). Declining, transition and slow rural territories in southern Italy Characterizing the intra-rural divides. *European Planning Studies*, 24(2), 231–253. https://doi.org/10.1080/09654313.2015.1079588

Rojo-Perez, F., Fernandez-Mayoralas, G., & Rodriguez-Rodriguez, V. (2015). TheGlobal Perspective on Quality in Later Life. In W. Glatzer, L. Camfield, V. Moller, & M. Rojas (Eds.), *Global Handbook of Quality of Life. Exploration of Well-Being of Nations and Continents* (pp. 469–490). New York: Springer.

Schroth, H. (2019). Are you ready for gen Z in the workplace? California *Management Review*, 61(3), 5–18. https://doi.org/10.1177/0008125619841006

Scott, N. W., Fayers, P. M., Aaronson, N. K., Bottomley, A., de Graeff, A., Groenvold, M., Koller, M., Petersen, M. A., & Sprangers, M. A. G. (2008). The relationship between overall quality of life and its subdimensions was influenced by culture: analysis of an international database. *Journal of Clinical Epidemiology,* 61(8), 788–795. https://doi.org/10.1016/j.jclinepi.2007.08.015

Sirgy, J. M., & Cornwell, T. (2002). How neighborhood feature affect quality of life. *Social Indicators Research*, 59(1), 79–114. https://doi.org/10.1023/A:1016021108513

Sirgy, M. J. (2018). The Psychology of Material Well-Being. *Applied Research in Quality of Life*, 13(2), 273–301. https://doi.org/10.1007/s11482-017-9590-z

Skevington, S. M., & Böhnke, J. R. (2018). How is subjective well-being related to quality of life? Do we need two concepts and both measures*? Social Science and Medicine,* 206, 22–30. https://doi.org/10.1016/j.socscimed.2018.04.005

Stokols, D. (1978). Environmental Psychology. *Annual Review of Psychology*, 29, 253–295.

Stokols, D., & Altman, I. (1987). *Handbook of Environmental Psychology*. New York: Wiley.

Strauss, W., & Howe, N. (1991). *Generations: The History of America's Future, 1584 to 2069*. New York: Quill William Morrow.

Su, L., Zhou, S., Song, J., & Zhao, H. (2023). Inside and outside the neighborhood: Short-term and long-term subjective well-being by geographical context. *Health and Place*, 83(March), 103086. https://doi.org/10.1016/j.healthplace.2023.103086

Summerville, S., Kirwan, E., Sutin, A. R., Fortune, D., & O'Súilleabháin, P. S. (2023). Personality trait associations with quality-of-life outcomes following bariatric surgery: a systematic review. H*ealth and Quality of Life Outcomes*, 21(1), 1–13. https://doi.org/10.1186/s12955-023-02114-0

Tapscott, D. (1998). *Growing Up Digital: The Rise of the Net Generation*. New York: McGraw Hill.

Uzzell, D., & Moser, G. (2006). Environment and quality of life. *Revue Europeenne de Psychologie Appliquee*, 56, 1–4. https://doi.org/10.1016/j.erap.2005.02.007

Vijayakumar, V., & Sangeetha, S. P. (2020). Urban form as a critical factor in the Quality of Life indicators – A review. *Materials Today Proceedings* https://doi.org/10.1016/j.matpr.2020.06.043

Walker, A. (2005). A European perspective on quality of life in old age. *European Journal of Ageing*, 2(1), 2–12. https://doi.org/10.1007/s10433-005-0500-0

Winters, J. V. (2011). Human capital, higher education institutions, and quality of life. *Regional Science and Urban Economics*, 41(5), 446–454. https://doi.org/10.1016/j.regsciurbeco.2011.03.001

Wrosch, C., & Scheier, M. F. (2003). Personality and quality of life: The importance of optimism and goal adjustment. *Quality of Life Research*, 12(SUPPL. 1), 59–72. https://doi.org/10.1023/A:1023529606137