

## Article

# Quality-of-Life Perception among Young Residents and Visitors: The Impact of COVID-19

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**Abstract:** This research intends to measure the quality of life (QoL) perception, from the perspective of residents and tourists towards Coimbra, a city with an important World Heritage Site, as classified by UNESCO. In these times, preserving tangible and intangible heritage is so important for future memories. Identifying the QoL perceptions through the eyes of residents and tourists allows the improvement of the community well-being of the destination for both stakeholders. Starting from this assumption, this study aims to: (i) measure the tourists' and residents' perceptions on quality of life (QoL); (ii) analyze the impact of the COVID-19 pandemic on QoL perceptions, both from the tourists' and residents' perspective. To achieve these objectives, a questionnaire was disseminated to residents and tourists in two different phases, before and during the COVID-19 pandemic. Results show that in general, residents and tourists exhibited, in both periods, medium and high perceptions of QoL, with an exception made for the *Urban Issues* domain that decreased even more during the pandemic. Furthermore, the results show, for residents and tourists, that the perception of *Urban Issues, Way of Life, Community Pride and Awareness, Economic Strength, and Recreation Amenities* impact significantly and positively their *Community Well-Being* perception. New paths for academics and for practitioners are presented at the end, as well as limitations and evidence for future research.

**Keywords:** quality-of-life perceptions; millennials; generation Z; crisis management; world heritage site



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## 1. Introduction

Quality-of-Life (QoL) is a cross-cutting and crucial construct that has been applied to several industries and to several targets. Despite QoL being a construct designed in the 1960s [1], it has been studied deeply during recent decades [1–6]. Euromonitor has been monitoring QoL indexes and their influence and impacts on society. This is crucial information to decision-makers when analyzing different management and social phenomena [7].

In tourism research, the QoL construct gained importance during the last decades due to the importance of the social impacts of this industry namely, to analyze the interactions between tourists and residents [1–3]. Tourism destinations need to evaluate QoL for residents and tourists to improve their experience and satisfaction index, attracting the attention of researchers in this specific concept [3,8–10]. In fact, according to past research in tourism, QoL is a central construct as leisure and traveling are themselves contributors to QoL [1]; however, most of the studies focus only on the QoL for residents and local communities [2]. Tourism as a major economic, cultural, and social force, for several communities around the world, is also a source of challenges. One of the most important is to balance the relationship between tourists and residents [3,8,10]. In this line, QoL needs to be addressed both on the demand and supply sides of tourism. The differences, similarities,

and particularities of QoL perception of tourists—the consumers of different goods and services of tourism, hospitality, and leisure at a destination and the residents—the providers and stakeholders serving as hosts to tourists are crucial aspects to manage the sustainability of tourism destinations [1,2,6]. This is, to our knowledge, the first study that measures, using the same scale, both tourists' and residents' QoL perceptions.

COVID-19 disrupted and completely transformed the tourism industry and the social interactions between tourists and residents. The pandemic also changed the QoL perception of local communities but also of tourists [3,11]. Due to the highly negative impact of the pandemic on the economy, the tourism industry was one of the most affected and vulnerable sectors [12]. COVID-19 additionally severely impacted the well-being of communities globally, especially those depending on the tourism industry [13,14]. The importance of restructuring the industry to make tourism a more resilient and sustainable activity in the future makes the discussion about the promotion of residents' and tourists' well-being more crucial than ever before [3,9,15].

In the present context, is important to explore the QoL perceptions of young generations, since they represent the future of tourism markets, both on the demand and the supply side [11]. In fact, members of Generation Y or Millennials (born between 1980 and 1994) and Generation Z (born between 1995 and 2015) [16,17] will represent, in the next decade, the biggest segment of every sector demand, and about 75% of the global labor force as well. These two generations share similarities since both are mainly made up of well-informed digital natives, open to innovations, and eager to consume and live new and hedonic experiences [18–20]. Besides being the biggest part of the demand and the supply side, youngsters are the main influencers of the other generations [20]. Moreover, they were the most affected population during COVID-19, having a strong impact on their consumption behaviors and habits [21,22]. So, to understand and foresee tourism industry sustainability, it becomes crucial to analyze the habits and behaviors of these generations and the impact that this disruptive event has had on their feelings, attitudes, and perceptions.

There is a gap in the past research in this area, as to our knowledge, no studies have analyzed and compared the QoL perceptions of young tourists and residents, before and during COVID-19. The purpose of this study is to measure the tourists' and residents' perceptions of QoL and the impact of the COVID-19 pandemic on those perceptions, specifically for younger generations. This study aims to: (i) measure the tourists' and residents' perceptions of quality of life (QoL) and (ii) analyze the impact of the COVID-19 pandemic on QoL perceptions, both from the tourists' and residents' perspectives.

This research is distinctive and original, one that allows the analysis of the QoL perceptions in a city with important World Heritage Sites by analyzing the perspectives of two important stakeholders: residents and tourists belonging to Generations Y and Z. Additionally, the effects of the COVID-19 pandemic are examined as residents' and tourists' opinions were considered in a period before COVID-19 (2019) and during the pandemic (2021). The paper starts with an overview of the main research on Quality-of-Life, specifically in the tourism industry context, followed by the methodology used to collect data from tourists and residents in Coimbra regarding the QoL perceptions in two different periods: before and then during the COVID-19 pandemic (2019 and 2021). The results will allow us to retrieve significant scientific implications on the research of QoL, and practical implications in the management of tourism destinations and organizations as well, especially in cultural tourism destinations.

## 2. Literature Review

QOL is considered a strong theoretical construct based on psychological theory. The general definition substantiates conventional psychology's definition as a cognisant intellectual and individual evaluation of satisfaction with one's life [1].

According to the World Health Organization (WHO), quality of life is a broader concept, and a subjective evaluation, part of a cultural, social, and environmental contexts [3],

but considered a universal value [6]. The international body refused to associate the complexity of this concept just with simple terms, such as 'lifestyle', 'mental state', 'health status', 'well-being' or 'life satisfaction'. The WHO defines Quality-of-Life (QoL) as "individuals' perceptions of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns" ([23], p. 3). Moreover, the WHO claims that QoL is composed of four dimensions: material well-being, community well-being, emotional well-being and health and safety well-being.

The QoL construct emerged in the 1960s [1] and usually is employed to mean a person's sense of well-being, satisfaction or dissatisfaction with life, or happiness or unhappiness [24]. As referred to by Sirgy [5], QoL captures subjective well-being (e.g., need satisfaction, life satisfaction, perceived QoL, happiness or life fulfillment) and it is a social indicator linked to economy and sociology. Later, Andereck and Nyaupane [2] noted that several researchers have developed broad domains or dimensions of QoL embracing several facets of an individual's life. More recently, Uysal, Sirgy, Woo, and Kim, [6] highlighted that over the last few decades, QoL is an emerging field of study in the social, behavioral, environmental, and policy sciences.

Schalock [4], when reviewing and synthesizing several years of QoL research, proposed that the following dimensions and indicators seem to capture the body of research on this subject: (i) emotional and psychological well-being (e.g., happiness, safety, spirituality, happiness); (ii) interpersonal and social relationships (e.g., friendship, intimacy, family, affection); (iii) material well-being, including employment and economic security (e.g., security, employment, ownership, possessions); (iv) personal development, competence and goals (e.g., personal competence, fulfilment, skills, education); (v) physical well-being, including wellness and recreation/leisure (e.g., nutrition, recreation, health, mobility, health care and insurance); (vi) self-determination, individual control and decisions (e.g., decisions, choices autonomy, personal control, personal goals/values); (vii) social inclusion, dignity, and worth (e.g., status, supports, acceptance, community activities, roles, volunteer activities, residential environment) and (viii) rights, including privacy (e.g., voting, access, privacy, civic responsibilities, ownership).

More recently, Ramkissoon [15] aligned with the '2030 Agenda for sustainable development' and considering COVID-19 effects, proposes a new framework for the residents' QoL. The author considers several dimensions in his model that will impact the overall residents' quality of life, such as (i) perceived social impacts, (ii) interpersonal trust, (iii) place-attachment, (iv) pro-social behavior, (v) pro-environmental behavior and (vi) support for tourism development. The conceptual study proposes a framework to contribute to the enhancement of residents' QoL during one of the most difficult times for the tourism industry, under the multiple constraints of a global health pandemic, while also including the topic of support for tourism development.

In fact, QoL and well-being are crucial aspects of tourism and hospitality due to their broad implications for society [9]. Past research is unanimous in considering that QoL and its impact on the tourism industry is a complex phenomenon involving several participants: tourists, residents, and other stakeholders such as local businesses and government. Additionally, updated research indicates a growing interest to identify a connection between tourism as a socio-economic leverage and QoL, with the perceived QoL as one of the main attributes that contribute to the destination brand image [3,9].

Several researchers have studied the concept of QoL of residents considering the impact of tourists and tourism development on different dimensions, such as the incorporation of resident perceptions of satisfaction, importance, and tourism effects [10]; the evaluation of community residents' QoL perceptions in the context of tourism development [2]. Previously, Belisle and Hoy [25] identified the positive and negative aspects of tourism as perceived by residents, hypothesizing that the perception of tourist impact varies with the distance a person lives from the tourist zone and also with the resident's socio-economic status. Later, McCool and Martin [8] analyzed the relationship between tourism development and the feeling of community attachment. Liu, Sheldon and Var [26]

based on Kendall and Var [27] and Travis [28] research work systematized tourism's positive and negative impacts on residents. Authors listed the tourism impacts to improve the residents' QoL perception: (i) more and better leisure facilities, (ii) more beaches designated as parks, and (iii) greater recognition of the importance of saving historical buildings; (iv) development of infrastructure and superstructure, (v) pollution control, and (vi) public health benefits as additional positive environmental aspects of tourism.

In this research direction, several authors have identified the tourism impacts on residents' perceptions of QoL. The positive impacts most identified in the literature include job opportunities, additional and improved infrastructure, festivals, restaurants, natural and cultural attractions, and recreation/leisure opportunities [2,8,10,25,26,29]. The negative tourism impacts impacting residents' QoL include overcrowding in the high season, traffic congestion, crime, increased cost of living, impacts on the local culture and conflict between tourists and residents all being detrimental to resident QoL [2,8,10,25,26,29,30].

As mentioned, the main goals of the present study are to measure the young tourists' and residents' perceptions of quality of life (QoL) and analyze the impact of the COVID-19 pandemic on QoL perceptions, both from the tourists' and residents' perspectives. According to past research, QoL was measured and operationalized either as a unidimensional or multi-dimensional construct [1–6]. Answering the call of Uysal et al. [6] to use well-established constructs and measures of well-being, in this study QoL was considered a multidimensional concept based on the perspective of Andereck and Nyaupane [2]. The authors opted to use a scale with eight dimensions: community well-being, urban issues, way of life, community pride and awareness, natural/cultural preservation, economic strength, recreation amenities, and crime and substance abuse. Additionally, the scale was used both for tourists and residents bearing in mind that even for different periods of time, both players evaluate those dimensions of the places they live in or visit [1,2,6].

Past research proved the impact of COVID-19 on tourists and communities. Travel and leisure were aspects of citizens' daily life that were severely affected by the restrictions imposed in the context of the pandemic, affecting tourists and local communities [12–14], namely their routines and plans [11,14], buying behaviors [21,22], and QoL perception [15]. This was particularly real for the younger generations [11,21,22]. In this line, the following hypotheses are postulated:

**Hypothesis 1.** *QoL perception of tourists and residents in a given destination can be comparable.*

**Hypothesis 2.** *COVID-19 pandemic changed the QoL perception of residents.*

**Hypothesis 3.** *COVID-19 pandemic changed the QoL perception of tourists.*

### 3. Methodology

The research setting was based on a questionnaire applied to individuals belonging to Generation Y (born between 1980 and 1994) and to Generation Z (born between 1995 and 2015) [16,17] who visited or were residing in Coimbra.

Coimbra is a Portuguese city, the capital of the eponymous district, located in the province of Beira Litoral. It is the largest city in the Central region of Portugal. Historically a university city: the University of Coimbra is one of the oldest in Europe and one of the largest in the country, founded in 1290. One of the oldest cities in the country, it was the capital of Portugal before Lisbon, until 1255, and it is the home of the first National Pantheon, the Monastery of Santa Cruz. On 22 June 2013, the University of Coimbra—Alta and Sofia, were all declared World Heritage Sites by UNESCO [31].

In this work two time periods were considered: Pre-COVID-19 (2019) and during the COVID-19 pandemic (2021). The questionnaire includes sociodemographic questions and QoL perceptions variables based on the scale of Andereck and Nyaupane [2]. A five item Likert scale was considered to measure QoL perceptions. The authors' original scale was used and adapted to this study context. After a pre-test and interviewing experts and

researchers in this specific area of study, some of the items were removed from the original scale. The remaining scale was translated into Portuguese, French and Spanish by native speakers. To avoid translation errors, the questionnaires were back-translated into English.

This study is based on an unrestricted random sample obtained from an online questionnaire shared on social networks, namely Facebook. The questionnaire was available in Portuguese, English, French and Spanish. For study period 1, the data were collected between September and December 2019, and for study 2 for the same period in 2021. The respondents who participated were adult citizens from Generations Y and Z and their participation was voluntary.

The sample profile includes tourists and residents (Table 1). The sample size for the residents in study period 1 is 751, and in study period 2 is 311. For tourists, the sample size is 603 in study period 1, and 250 in study period 2. The tourists are mainly from Portugal in both studies, 76.6% in period 1 and 83.2% in period 2. Besides Portuguese people, the international respondents mainly came from Brazil, Spain and other European countries.

**Table 1.** Sample Profile: Gender, Country of Residence, Education, Occupation, and Age.

	Residents (N = 751/311)				Tourists (N = 603/250)			
	Study Period 1		Study Period 2		Study Period 1		Study Period 2	
	N	%	N	%	N	%	N	%
Gender								
Male	300	39.9	132	42.4	269	44.6	115	46
Female	451	60.1	179	57.6	334	55.4	135	54
Country of residence								
Portugal	751	100	311	100	416	76.6	208	83.2
Other	-	-	-	-	127	23.4	42	16.8
Education								
No high school	16	2.2	4	1.3	21	3.5	4	1.6
High school	306	40.7	115	37	220	36.5	97	38.8
Bachelor Degree	347	46.2	143	46	283	46.9	120	48
Master degree	76	10.1	44	14.1	70	11.6	23	9.2
PhD degree	6	0.8	5	1.6	9	1.5	6	2.4
Occupation								
Domestic/Unemployed	22	2.9	11	3.5	17	2.8	4	1.6
Sole proprietorship	22	2.9	6	1.9	20	3.3	17	6.8
Student	570	75.9	239	76.8	357	59.7	166	66.4
Commercial or administrative	57	7.6	27	8.7	82	13.7	30	12
Factory worker	30	4	8	2.6	43	7.2	15	6
Self-employed professional	24	3.2	12	3.9	32	5.4	11	4.4
Middle/senior managers	26	3.5	7	1.9	47	7.9	7	2.8
Age								
18–20	429	57.1	137	44.1	237	39.3	89	35.6
21–30	266	35.4	140	45.0	275	45.6	135	54.0
31–39 *	56	7.5	34	10.9	91	15.1	26	10.4
Number of years residing in Coimbra/ Length of stay in Coimbra (average)	-	17.0 years		21.2 years		12.1 nights		12.2 nights
Number of visits in Coimbra (average)	-					3.4 previous visits		3.5 previous visits

\* for the study period 2 the maximum was 41 years old. Source: The authors.

In the first study period, residents and tourists are aged between 18 and 39 years, and in the second between 18 and 41 years. Independently of the time period considered,



both for residents and tourists, most of the participants were female (the percentage varies between 54% and 60.1%). They are highly educated, as more than 57% have university degrees and between 36.5% and 40.7% have 12 years of school. Most of them are students or work in the commercial or administrative sectors. Most of the residents were on average residing in Coimbra for 17 years in the first period and for 21 years in the second. Tourists inquired in both periods were in Coimbra for the third or fourth time in long stays—more than 12 nights.

#### *Data Analysis*

The main goal of this study is to measure the tourists' and residents' perceptions of QoL and the impact of the COVID-19 pandemic on those perceptions, both from the tourists' and residents' perspectives.

The first stage includes the analysis of the overall data related to those different aspects. Subsequently, a survey-type analysis was used to understand possible changes in QoL perceptions among tourists and residents over time, considering two moments: before COVID-19 and during the pandemic.

A factor analysis was applied to the items of QoL perceptions, by study period and for each group—residents and tourists—to identify a common factor structure. Cronbach's alpha was computed to assess reliability. As a result of these analyses, six domains were considered: *Community Well-Being*, *Urban Issues*, *Way of Life*, *Community Pride and Awareness*, *Economic Strength*, and *Recreation Amenities*.

The Friedman test and multiple comparisons were used to compare the six QoL perceptions domains for each period, for both the residents' and tourists' answers. A Mann-Whitney test was applied to identify significant differences between the study period 1 and 2 for tourists and residents for each domain.

The Multiple Linear Regression model was used to evaluate if the domains of Urban Issues, Way of Life, Community Pride and Awareness, Economic Strength and Recreation Amenities could predict Community Well-Being.

Two models were considered, one for residents and another for tourists. The assumptions of the models specifically the zero mean, homogeneity and normal distribution of the errors were evaluated. The last two assumptions were evaluated graphically. To make a diagnostic of the presence of multicollinearity, the Variance Inflation Factor (VIF) was computed. The data analysis was conducted with the help of the software SPSS version 26.

#### **4. Results**

As mentioned, the factor analysis was applied to the items of QoL PERCEPTIONS, by study period and for each group, both residents and tourists. The reliability of the scales is supported by the computed Cronbach's alpha. A Cronbach's alpha value between 0.6 and 0.7 shows an acceptable level of reliability and above 0.8 is considered very good [32], but also it is agreed that values close to 0.60 can be considered satisfactory [33,34]. Table 2 reports Cronbach's alpha for residents and tourists for the two periods considered. The results obtained show values between 0.600 and 0.805.

Considering the structure presented in the previous table, for each respondent the average of the items was computed for the six domains, for the residents and for the tourists in the two periods. As presented in Table 3, in general, residents and tourists exhibited medium or high perceptions of *Community Well-Being*, *Way of Life*, *Community Pride and Awareness*, *Economic Strength* and *Recreation Amenities* (mean above 3.5), independently of the study period, the exception is for the domain *Urban Issues*. This domain presents, generally, medium or low perception levels for residents in both study periods and for tourists in study period 2. Globally, tourists in period 1 had a positive perception in this domain.

**Table 2.** Cronbach's alpha of QOL perceptions domains.

Domains	QOL Perception Items	Residents (N = 751/311)		Tourists (N = 603/250)	
		Period 1	Period 2	Period 1	Period 2
Community well-being	Feeling safe				
	Clean air and water				
	City services such as police and fire protection	0.728	0.757	0.786	0.716
	Quality of roads, bridges, and utility services				
Urban issues	The prevention of (crowding and congestion)	0.655	0.768	0.687	0.746
	Controlled (traffic)				
Way of life	My personal life quality				
	A feeling of belonging in my community				
	Having tourists/residents who respect my way of life	0.749	0.784	0.736	0.791
Community pride and awareness	An understanding of different cultures				
	Awareness of natural and cultural heritage	0.715	0.786	0.805	0.746
	Opportunities to participate in local culture				
Economic strength	Stores and restaurants owned by local residents	0.634	0.651	0.600	0.699
	Fair prices for goods and services				
Recreation amenities	Plenty of festivals, fairs, museums	0.714	0.733	0.724	0.713
	Having live sports to watch in the community				

Source: The authors.

**Table 3.** Mean of QOL perception Domains.

Domains	Residents		Tourists	
	Period 1	Period 2	Period 1	Period 2
Community well-being	3.962	3.922	3.879	3.899
Urban issues	3.499	3.404	3.529	3.440
Way of life	3.945	3.976	3.888	3.984
Community pride and awareness	3.989	4.029	3.957	4.059
Economic strength	3.858	3.862	3.865	3.958
Recreation amenities	3.785	3.867	3.793	3.942

Source: The authors.

Through Friedman's test, it was concluded that for both time periods, tourists and residents perceived the lowest level of QoL perceptions for *Urban Issues* and the highest for *Community Pride and Awareness*, when compared to the other domains ( $p < 0.005$ ).

Table 4 presents the results of the Mann–Whitney test used to evaluate the differences between the study period 1 and 2 with respect to QoL perceptions domains both for residents and tourists.

The results presented in the table above show that residents have significantly different QoL perceptions in the two periods, in three of the six domains analyzed. The residents' perception of *Urban Issues* decreases significantly from period 1 (before COVID-19) to period 2 (during COVID-19) and increases for *Way of Life* and *Recreation Amenities*.

For the tourists only in one of the domains, *Community Well-Being*, no differences were found. Regarding the other five domains of QoL perceptions, tourists showed a significant increase from period 1 to period 2 for *Way of Life*, *Community Pride and Awareness*, *Economic Strength* and *Recreation Amenities*, and a significant decrease for *Urban Issues*.

**Table 4.** Mann-Whitney test for QOL perceptions in the two periods for the residents.

QOL Perceptions Domains	Residents				Tourists			
	Mean Rank		Mann-Whitney	<i>p</i>			Mann-Whitney	<i>p</i>
	Period 1	Period 2			Period 1	Period 2		
Community well-being	534.89	523.31	114,234	0.286	424.85	432.2	74,076	0.345
Urban issues	539.7	511.71	110,625	0.085 *	434.87	408.02	70,630	0.071 *
Way of life	522.98	552.07	110,384	0.078 *	414.43	457.32	67,795	0.010 ***
Community pride and awareness	524.18	549.17	111,285	0.111	416.47	452.4	69,026	0.025 **
Economic strength	529.9	535.35	115,582	0.394	417.21	450.61	69,473	0.033 **
Recreation amenities	522.23	553.88	109,822	0.060 *	413.18	460.33	67,043	0.005 ***

\*  $p < 0.1$ ; \*\*  $p < 0.05$ ; \*\*\*  $p < 0.01$ . Source: The authors.

#### *Predicting Residents' and Tourists' QoL Perceptions of Community Well-Being*

Multiple linear regression was used to predict respondents' overall perceptions of residents and tourists based on the QoL perceptions domains. In this study, *Community Well-Being* was the dependent variable, and independent variables included *Urban Issues*, *Way of Life*, *Community Pride and Awareness*, *Economic Strength* and *Recreation Amenities*, and several control variables, specifically study period, gender, and age. The use of control variables is important because they increase the internal validity of the study limiting the effect of confounders and other extraneous factors. Table 5 shows the regression coefficients and related results of the multiple linear regression for the residents' data and Table 6 for the tourist's data.

**Table 5.** Multiple Linear Regression analysis results for Residents.

	Unstandardized Coefficients		Standardized Coefficients	t	<i>p</i>	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
	Constant	1.017	0.123				8.266
Urban issues	0.166	0.019	0.232	8.912	0.000	0.758	1.320
Way of life	0.228	0.029	0.248	7.895	0.000	0.520	1.922
Community pride and awareness	0.150	0.030	0.162	5.029	0.000	0.496	2.015
Economic strength	0.166	0.026	0.191	6.498	0.000	0.596	1.677
Recreation amenities	0.042	0.021	0.056	2.031	0.042	0.671	1.490
Study period	−0.046	0.033	−0.032	−1.390	0.165	0.979	1.021
Gender	0.020	0.030	0.015	0.646	0.518	0.985	1.015
Age	0.003	0.003	0.020	0.872	0.384	0.973	1.028

Dependent variable: Community well-being;  $R^2 = 0.458$ . Source: The authors.

The model assumptions were evaluated, and the model was considered valid, both for residents (Table 5) and tourists (Table 6). To evaluate multicollinearity problems Variance Inflation Factor (VIF) was computed. The results show values under 5, meaning that the models have no multicollinearity problems and that are both valid (also see Appendix A).

The total variance explained by the model was 45.8%. Meaning that about 45.8% of the variance in *Community Well-Being* is linearity explained by variations of the independent variables. The model is statistically significant ( $F(8, 1053) = 111.174, p = 0.000$ ). In other words, at least one of the independent variables is relevant to predict community well-being.



**Table 6.** Multiple Linear Regression analysis results for Tourists.

	Unstandardized Coefficients		Standardized Coefficients	t	p	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
Constant	0.628	0.124		5.071	0.000		
Urban issues	0.143	0.021	0.194	6.967	0.000	0.687	1.455
Way of life	0.248	0.033	0.262	7.457	0.000	0.434	2.307
Community pride and awareness	0.234	0.031	0.253	7.601	0.000	0.483	2.07
Economic strength	0.115	0.028	0.128	4.086	0.000	0.545	1.834
Recreation amenities	0.078	0.024	0.095	3.211	0.001	0.617	1.621
Study period	−0.037	0.035	−0.025	−1.068	0.286	0.982	1.019
Gender	0.033	0.032	0.024	1.032	0.302	0.992	1.008
Age	0.004	0.003	0.036	1.552	0.121	0.98	1.021

Dependent variable: Community well-being;  $R^2 = 0.548$ . Source: The authors.

All the QoL perception domain predictors have a positive and significant impact on predicting *Community Well-Being* ( $p < 0.05$ ). That is, an increase in the perception of *Urban Issues*, *Community Pride and Awareness*, *Economic Strength* and *Recreation Amenities* is associated with a higher perception of *Community Well-Being*. *Way of Life* has the highest standardized beta coefficient (Beta = 0.248), so it is the strongest variable to predict *Community Well-Being*. The second most important is *Urban Issues*, the third is *Economic Strength*, followed by *Community Pride and Awareness* and *Recreation Amenities*.

The total variance explained by the model was 54.8%. Meaning that about 54.8% of the variance of the *Community Well-Being* linearity is explained by variations of the independent variables. The model is statistically significant ( $F(8, 844) = 128.087$ ,  $p = 0.000$ ). In other words, at least one of the independent variables is relevant to predict *Community Well-Being*.

All the QoL perception domain predictors have a positive and significant impact to predict *Community Well-Being* ( $p < 0.001$ ). In the case of tourists, *Way of Life* has the highest standardized beta coefficient (Beta = 0.262), so it is the strongest variable to predict *Community Well-Being*. The second is *Community Pride and Awareness*, the third is *Urban Issues*, followed by *Economic Strength* and *Recreation Amenities*.

## 5. Discussion and Conclusions

The present research aimed to measure tourists' and residents' perceptions of QoL in a World Heritage city comparing the period before and during the COVID-19 pandemic. Despite the research on the QoL construct being ongoing since the 1960s, the present pandemic highlighted the importance of studying the perceived well-being of tourists and especially that of the local communities [3,9,15]. In fact, the QoL of residents, and specifically of young generations, was deeply affected by the pandemic [11]. Therefore, the focus of this research is to measure the QoL perceptions both from the tourists' and residents' perspectives, comparing two different periods—before (2019) and during COVID-19 (2021).

Results show that, in general, young residents and tourists exhibited, in both periods, before and during the COVID-19 pandemic, medium or high perceptions of QoL, with an exception made for the *Urban Issues* domain. In fact, residents and tourists perceived the lowest level of *Urban Issues* and the highest for *Community Pride and Awareness* in both periods of QoL perception domains, confirming past studies [8]. This is an important result that should be analyzed by the local entities, considering that both for residents and tourists the 'prevention of (crowding and congestion)' and 'controlled (traffic)' are crucial aspects that have not been covered yet.

On the other hand, *Community Pride and Awareness* was the QoL perception domain ranked higher for both players. 'An understanding of different cultures', 'awareness of

natural and cultural heritage' and 'opportunities to participate in local culture' were aspects considered as very positive and present for the younger generations. This result may relate to the fact that Coimbra is a university city where students from around the world bring different cultures and traditions and contribute to a more cosmopolitan environment. Additionally, "Coimbra Alta e Sofia" has been considered a WHS by UNESCO—including an important natural, material and immaterial cultural heritage—since 2013, bringing consciousness and pride of that heritage to the young residents, and to tourists as well as bringing an increased interest in visiting this important WHS. Lastly, a strong, diverse, and rich calendar of cultural activities in the city could be the responsible factor for the belief of young tourists and residents regarding the opportunities to participate in local culture. These results also highlighted important differences between the two study periods for residents and tourists in what concerns the QoL perception domains. While there was a significant decrease in *Urban Issues* from period 1 (before COVID-19) to period 2 (during COVID-19) a significant increase in *Way of Life* and *Recreation Amenities* was found for residents and tourists.

*Urban Issues* are a negative domain perceived by tourists and mainly by residents before COVID-19, and especially during the pandemic. This result is perhaps explained by the fact that after several periods of quarantine, residents and tourists were eager to go out and enjoy the city. However, the old problems connected with traffic and especially crowd control were present and overestimated during the pandemic. Interestingly, *Way of Life*, which includes the items 'My personal life quality', 'A feeling of belonging in my community', and 'Having tourists/residents who respect my way of life' increased during the pandemic, showing that the human and social connections and relationships were increasingly valued during the outbreak of COVID-19 and especially the importance of tourism both for young tourists and residents, confirming other studies [35–38].

In this vein, *Recreation Amenities* domain was also ranked higher during the pandemic, showing that tourists and residents perceived more value in the aspects of 'Plenty of festivals, fairs, museums' and 'live sports to watch in the community'. Again, after several periods of time, some quite lengthy, when individuals had to be isolated and quarantined in their homes, any opportunities to enjoy face-to-face events, culture and leisure activities were overvalued and are important strategies to activate tourism after the pandemic, in line with past research [39,40].

In contrast, only the tourists in Coimbra perceived a significant increase between the two periods for *Community Pride and Awareness* and *Economic Strength*. Regarding the first QoL perception domain, it is understandable that tourists consider the presence of different cultures more than residents as well as being conscious of heritage, and the opportunities to participate in local culture since residents are somewhat aware of those dimensions as they live in the city. However, as regards the second QoL perception domain, *Economic Strength*, this is a surprising result. In fact, only tourists perceive that in Coimbra there are 'Stores and restaurants owned by residents' and 'Fair prices for goods and services. This result may be related to the different reality in most tourism destinations after the outbreak of COVID-19, since several tourism and leisure businesses, restaurants, and shops closed during the pandemic [41]. Consequently, residents felt that several small businesses were lost and also, due to the economic difficulties the prices were higher than before the pandemic. These results also go in line with the results Uysal and his colleagues [20] which indicates tourism as an economic and social leverage.

Furthermore, the results show that for residents and tourists the perception of *Urban Issues*, *Way of Life*, *Community Pride and Awareness*, *Economic Strength*, and *Recreation Amenities* impact significantly and positively the perception of *Community Well-Being*. This result shows that the wider concept of QoL perception, *Community Well-Being* can be explained by the other QoL perception domains, which signifies that if *Urban Issues*, *Way of Life*, *Community Pride and Awareness*, *Economic Strength*, and *Recreation Amenities* are positively perceived by tourists and residents this means that they also perceive a higher *Community Well-Being*. This result contrasts with past research where QoL was considered more indi-

vidual and personal [2]. Results, however, are in line with Belisle and Hoy [25], who found that, despite the perception of some serious negative aspects, residents consider the overall impact of tourism to be beneficial.

Additionally, it was proved that the *Way of Life* QoL perception domain presents the strongest effect in the *Community Well-Being* explanation and *Recreation Amenities* present the lowest. Again, we confirm the importance of social bonding, and life in a community that tourist activity and tourists' and residents' encounters provide over other factors, in line with previous research [35–43]. The second most important QoL perception domain to explain *Community Well-Being* differs between residents and tourists. While for residents *Urban Issues* are the second most important dimension impacting the well-being of the community, for tourists it is *Community Pride and Awareness*. That domain compared with *Urban Issues* is, in fact, an increasingly valued aspect for those who had to work and live daily in the tourism destination and as was proved, is considered in Coimbra a negative issue, that clearly impacts the sense of general well-being. On the other hand, *Community Pride and Awareness* are highly considered by tourists as something that explains the welfare and general well-being of the community, confirming that they value cultural exchanges and social experiences more and more demanded and valued in the present days, especially after the COVID-19 pandemic [36,37,39,41,43,44].

### 5.1. Implications

The present paper brings important contributions to the study of QoL, especially in the comparison of perceptions between tourists and residents. Additionally, the impact of COVID-19 on QoL perceptions, specifically in the younger generations is addressed, topics understudied in tourism research.

This is one of the first studies, to our knowledge that measures, using the same scale, QoL perceptions for both residents and tourists. Most of the past studies focused on measuring the QoL perception exclusively from the residents' perspective [1–5,8,10,25,26]. Later, Uysal and colleagues (2020) present both residents' and tourists' perspectives, on the importance of QoL and well-being in the tourism and hospitality sector. In their study authors shows that the path for future research, in this area, should be the discussion of these two players' perspectives. Accordingly, after comparing similarities and differences with other studies, our results present a novelty enriching the body of QoL knowledge: the application and validation of the same scale for residents and tourists.

On the management side, this study's results add some important insights into the view of a more sustainable and resilient tourism industry in the future. Youngsters' perspective on their QoL is crucial information to build strategies to have happier and more satisfied tourists and residents. Additionally, results can be useful for Destination Management Companies (DMC) to improve infrastructure in the city to satisfy residents and tourists as well, such as transport, more green spaces, and cycle paths, among others, as *Urban Issues* were a negative domain when perceived by tourists and mainly by residents before COVID-19.

The income flows from the tourism industry that stopped during the pandemic was something heavily felt by host communities, and are now being restored. Nevertheless, the sustainability of tourism destinations will depend on the measures that governments and managers will undertake to respond to the well-being and needs not only of tourists but especially of the local communities. This is more crucial with the young generations that are the industry's future industry both in the demand and the supply sides.

This study brings important insights to help policymakers in civil society and in the tourism industry by offering the perceptions from Generation Y and Z members, as consumers and also as future workers and managers. The results indicate that destination managers should consider that young residents and tourists are more demanding and critical in regard to the destinations where they live and that they visit, asking for urgent measures. Additionally, sustainability issues are strongly connected with QoL perspectives because with the pandemic, tourists and residents realized that the well-being of the planet

is crucial for human-being QoL, no matter if they live in the city or just visit. These are important outputs for policymakers to augment the QoL in the cities, specifically with WHS. Additionally, more studies applied to other WHS cities allow us to make a comparison and understand if being recognized by UNESCO has important impacts on the perception of Quality-of-Life by residents and by tourists.

Stakeholders in the tourism industry should create action plans to overcome the crisis provoked by the pandemic and the markets' instability because of war and help recover this crucial economic sector to its previously buoyant levels. These plans should include the promotion of the QoL of residents and, therefore, tourists. The perspective of QoL by residents can influence in a positive way the tourists' QoL perspective, once they can give inputs to improve the destination to be more attractive to visitors.

After lockdowns and several restriction measures, tourists and residents perceive tourism destinations in a more critical and demanding way, especially the issues regarding urban organization and management. Local authorities should build strategies to correct negative aspects such as crowding and traffic control.

On the other hand, an attribute that should be valued by the Destination Management Organizations (DMO's) and local tourism businesses is the Community Pride and Awareness dimension. In fact, the local culture, the awareness of heritage, and the opportunity to experience local culture in a cosmopolitan environment are dimensions highly valued both by tourists and residents. So, cultural activities and the valorization of natural and cultural heritage are aspects that should be encouraged by tourism businesses. Additionally, this specific concept should be included in the destination branding and heavily promoted by DMOs and Destination Management Companies (DMCs).

After the COVID-19 pandemic, tourists are eager to travel again, and this crisis supplied a chance for tourism businesses to become more connected with their respective local communities, so both young residents and tourists value, more than ever, recreation amenities that, along with cultural activities should be highly present in tourism destinations.

Managers should face the present crisis as a unique opportunity to renovate and redirect the global tourism system to take on the Sustainable Development Goals (SDGs) and reconnect tourists with the host communities by giving primacy to the well-being of both [11]. The present times bring the urgency for researchers and managers to work together to forecast the trends in tourism markets and find solutions to overcome future crises.

### *5.2. Limitations and Further Research*

One of the limitations is related to the data since a larger sample with respondents from other generations would possibly allow for better contrast of the results. Additional studies on the generational segments of both the tourists and residents are crucial. Another limitation connected with the sample is that mainly domestic tourists were questioned. From a statistical point of view, the results obtained in this work seem to be significant and robust. Still, the work has some limitations that may lead to future investigations on this topic. First, the data used refer only to generations Y and Z. It would also be interesting to analyze the behavior of the Baby Boomers generation and X. Second, the use of other QoL perceptions could provide relevant evidence to the explanation of Community Well-Being. The authors suggest that more dimensions of QoL should be explored in the future to improve the model. Additionally, a comparison of QoL perceptions before, during and after the COVID-19 pandemic should be considered in future research. Additionally, the combined use of traditional marketing data collection techniques with neuromarketing methods, specifically those capturing the unconscious behavior of individuals could benefit future studies in this area [45,46]. This way, it would be possible to assess the conscious and unconscious reactions of residents and tourists deepening the study of QoL perceptions [46].

Finally, the antecedents and consequences of the QoL perception should be considered as well. It would be critical to assess other dimensions such as destination image, destination brand personality, perceived risks, individual personality traits, country of residence, and cultural background, among others.

**Author Contributions:** C.S. and S.A. conducted the literature review. C.S. conducted the data collection. M.R. has undertaken the data analysis with the descriptive and factorial analysis, correlations and Kruskal Wallis test. Conclusions, discussion, and further research sections were built by the three authors. All authors have read and agreed to the published version of the manuscript.

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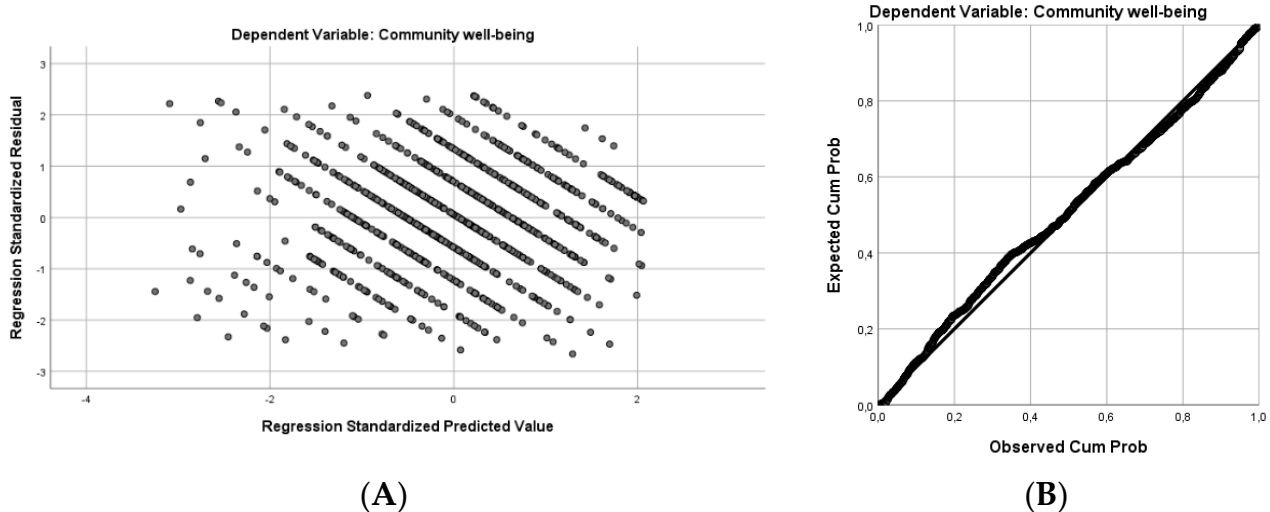
**Data Availability Statement:** All the secondary data used in this study was collected online as provided in the introduction section.

**Conflicts of Interest:** The authors declare no conflict of interest.

## Appendix A

### Appendix A.1. Validation of the Multiple Linear Regression Assumptions for the Resident's Dataset

The points on the Figure A1A are randomly distributed around the horizontal line corresponding to the null residue, forming a patch of uniform width. Hence, we can assume that the residuals have zero mean (the sample mean is  $-7.5 \times 10^{-16}$ ) and constant variance. The points on the Normal P-P plot of the regression standardized residual (Figure A1B) tend to concentrate around the slope line 1 that passes through the origin, which gives evidence that the distribution of residuals is normal.

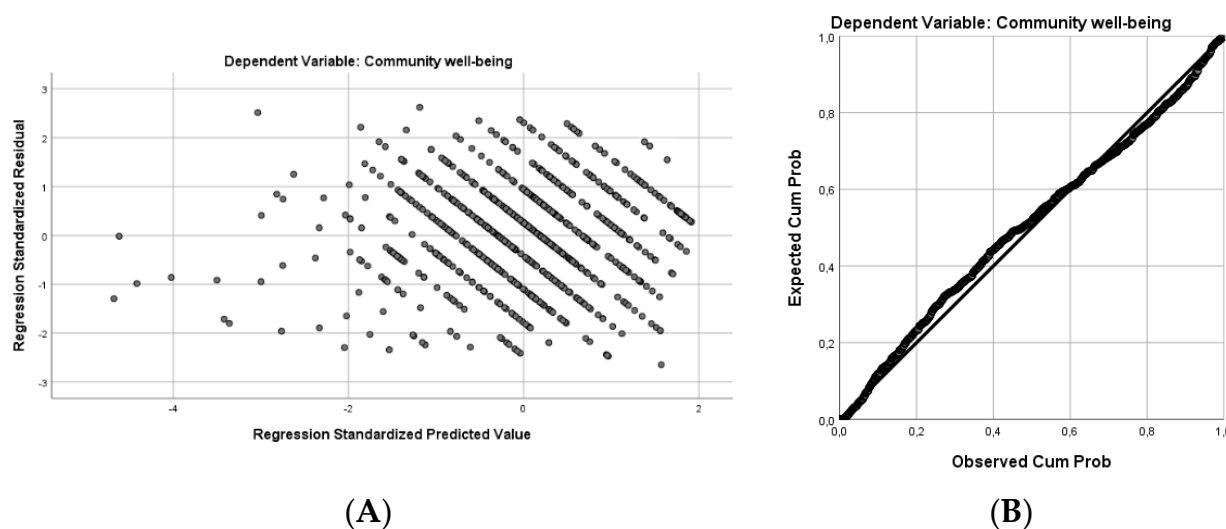


**Figure A1.** (A) Scatterplot: regression standardized predicted values versus regression standardized residuals. (B) Normal P-P plot of regression standardized residual.

### Appendix A.2. Validation of the Multiple Linear Regression Assumptions for the Tourist's Dataset

The points on the Figure A2A are randomly distributed around the horizontal line corresponding to the null residue, forming a patch of uniform width. Hence, we can assume that the residuals have zero mean (the sample mean is  $-9.0 \times 10^{-16}$ ) and constant variance. The points on the Normal P-P plot of the regression standardized residual (Figure A2B) tend to concentrate around the slope line 1 that passes through the origin, which gives evidence that the distribution of residuals is normal.





**Figure A2.** (A) Scatterplot: regression standardized predicted values versus regression standardized residuals. (B) Normal P-P plot of regression standardized residual.

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