

A public service management model as an antecedent for citizen satisfaction and fiscal policy

A public
service
management
model

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Abstract

Purpose – The study of citizens' perceptions of the performance of public services and their relationship with the taxes allocated to them is of great interest in the context of public and fiscal management and the welfare state. This study has a twofold objective in defining a structural equation modeling (SEM) model: on the one hand, to measure the relationship between the perception of the performance of public services and the taxes allocated to them and on the other hand, to study the reflection of the perception of the performance of public services on the happiness and satisfaction of citizens.

Design/methodology/approach – To achieve this objective, a descriptive cross-sectional study was carried out based on data from the "Public opinion and fiscal policy, 2022" questionnaire of the Centro de Investigaciones Sociológicas (CIS) through a survey with a sample of 2,543 citizens representative of the Spanish population. The partial least squares (PLS) method was applied to test the following hypotheses.

Findings – The result of this research allows us to know which variables in relation to citizens' perception of the functioning of public services have a positive influence on use of taxes and on citizens' happiness and satisfaction.

Originality/value – One of the novelties of this study is to analyse the effect of consumer perception on the performance of public services from the perspective of the welfare state by improving citizens' happiness and satisfaction.

Keywords SEM model, Public marketing, Management, Public service, Taxes, Happiness

Paper type Research paper

1. Introduction

In times of rising inflation and loss of purchasing power, as the current, the study of the proper management of public services and fiscal policy takes on great importance among academics, practitioners and the general public.

As far as Spain is concerned, the state guarantees its citizens a series of rights (political, economic, social, etc.) that have given rise to the welfare state (Moreno, 2003). In return, it requires them to accept living in a State governed by the rule of law and to contribute materially to sustaining this pact, which is reflected in the Spanish Constitution of 1978 (Goenaga Ruiz de Zuazu, 2018; González and Bouza, 2009). Consequently, the notions of social pact and fiscal pact appear as sides of the same coin (Feld and Frey, 2007; Frey and Torgler, 2006).

But the growing needs for public revenue in developed countries, including Spain, have led to an expansion of public spending to cover the commitments made by the state (Goenaga Ruiz de Zuazu, 2018). For all these reasons, the context of Spain requires an in-depth study from the perspective of welfare perceived through the payment of taxes (Novo *et al.*, 2020).

Most previous studies on public opinion and tax policy have focused on attitudes towards fraud (Alm and Gomez, 2008; Fernandez-Albertos and Kuo, 2016; Goenaga Ruiz de Zuazu, 2017; Maria-Dolores *et al.*, 2010; McDonough *et al.*, 1986; Novo *et al.*, 2020; Torregrosa Hetland, 2021),



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inequality and poverty (Sánchez, 2021) as well as another line of research has been on immigration (Espenshade and Calhoun, 1993; Hatton, 2016). Thus, there is a gap in the study from the perspective of the proper management of taxes. So, one of the novelties of this work is the study of public opinion and tax policy from the perspective of the management of public services for the proper management of taxes.

Additionally, this crisis situation is influencing the definition of the welfare state, as the intervention of the public sector to ensure and protect citizens against certain risks, in such a way that the redistribution of state resources leads to a greater level of equity in the country (Calero, 2021; Cazes, 1985; Flora and Alber, 1981; Monereo, 1995), which, in many countries of the European Union, has begun to be redefined towards neoliberal policies. This implies a tightening of eligibility requirements for social benefits (Adelantado, 2017), as well as labour market deregulation and wage restraint (Moreno, 2004). As far as Spain is concerned, the social benefits and public services of the welfare state are considered by citizens as an acquired right, which makes it very difficult to reduce the services provided (del Pino, 2007). However, this perception varies from one individual to another, especially in terms of satisfaction with the services (González and Carrera, 2012). This perception is positive and influences both the willingness to pay taxes and the image that this use has on citizens (Dirección General de Gobernanza Pública, 2019). Therefore, another of the contributions of this work is the study of the perception of citizens' level of satisfaction with nine public services – Education; Health care; The management of pensions; Administration of justice; Public safety; Social services; Public transport; Public works; Aid to dependent persons – and their influence on tax use.

On the other side, research into consumer happiness management is common in the fields of psychology, organisational behaviour, sport, religion, education, tourism and hospitality (Fu and Wang, 2020). Another of the novelties of this study is the study of happiness from public service management and public marketing. For this purpose, in this paper happiness is considered as a mediating variable between the perception of public services and the general satisfaction of citizens.

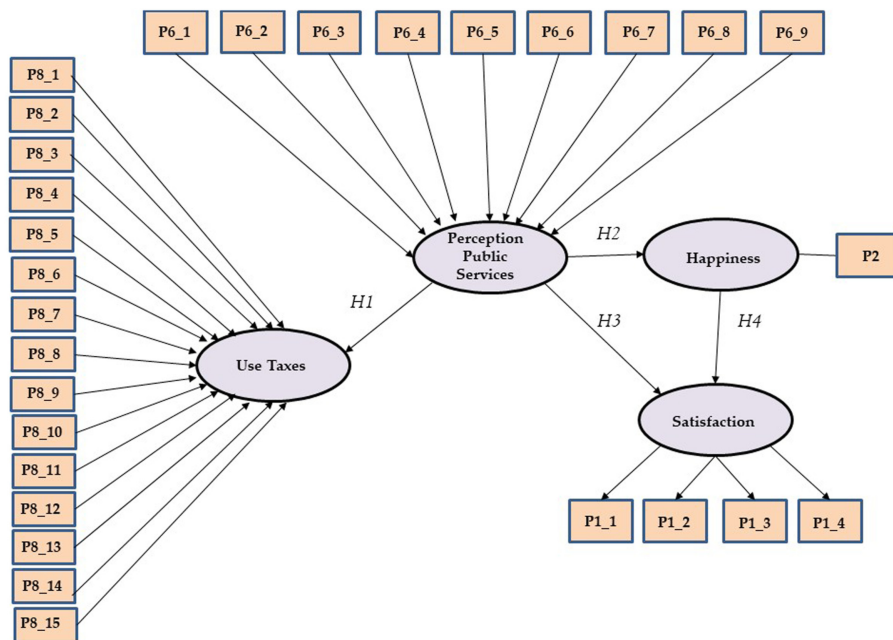
Satisfaction and happiness, which are subjective, depend on many factors, one of them being the social policies of states (Veenhoven, 1994). These provide services that increase the happiness of citizens, their quality of life and satisfaction with it, as well as countries' standard of living. Moreover, these social policies have a favourable opinion among citizens, with healthcare being the best perceived (Instituto de Estudios Fiscales, 2020). Most Spaniards are in favour of increasing public spending on services such as health care, disability care, aid for dependency, aid for the unemployed, education and R&D (Herrero *et al.*, 2018).

Therefore, this work contributes in the study of public opinion and fiscal policy from the perspective of the management of public services for an adequate management of taxes and greater citizen satisfaction and happiness. To this end, the aim of this work is to design a structural equation modelling (SEM) model that measures the perception of the performance of public services on the use of tax payments for public services and likewise, on citizens' happiness and satisfaction, which implies improving the welfare state.

The paper is structured as follows. First, the conceptual framework of the study is described, together with the hypotheses to be tested in the SEM model. Then, the results of the model are explained. Finally, the conclusions are explained detailing the implications of the proposed public service management and fiscal policy model.

2. Conceptual framework and hypotheses

The theoretical model with constructs, items and hypotheses is shown below (see Figure 1). Firstly, we analyse the extent to which citizens' perceptions of the performance of public services influence the use of taxes to finance public services. Secondly, we measure whether citizens' perception of the performance of public services influences citizens' happiness as



A public service management model

Figure 1. Model of management of public services in relation to the use of fees and the generation of citizen satisfaction and happiness

well as their overall satisfaction. Finally, the influence of citizens' happiness on their overall satisfaction is contrasted.

Nowadays, citizens show more interest in the public services they receive and which are financed by their taxes. Satisfaction with the payment of such taxes is found to be higher the better citizens' perception of public services (Rueda, 2011). Moreover, most citizens agree with the use of public money obtained from taxes, as they consider that they are used to finance public services that are indivisible and necessary for society (Serrano, 2010). But these public services, as argued by Grönroos (1984), must be functional and of high quality. Novo *et al.* (2020) found that a good opinion of social services in Spain positively influences both the payment of taxes and the good opinion of the use of these assets obtained.

Therefore, the following hypothesis can be defined:

H1. Perception of public service delivery has a strong influence on the use of taxes on public services.

On the impact of a strong welfare state on society, Martínez *et al.* (2004) indicates that it can affect the happiness of the individual, increasing the degree of satisfaction with life. Easterlin (2013) stated that full employment and social protection directly influence human happiness. Bergqvist *et al.* (2013) expanded on this by indicating that social protection policies and services provided by the state increase the happiness of citizens more markedly in those with fewer resources. This happiness associated with public services is much deeper and more marked if it distinguishes greater investment in social benefits. This happiness can be measured empirically through regression models, which characterise the influence of well-functioning social services on subjective happiness gains (Ortega and Cortés, 2017). Therefore, it is not only important that public social services exist, but also that these policies are perceived and valued by citizens (Veenhoven, 2009). This valuation of public services, coupled with strong social policies, increases the collective happiness of citizens (De Prycker, 2010;

Duncan, 2010; Florida *et al.*, 2013; Frey and Stutzer, 2018; Wu and Zhu, 2016). Therefore, citizens' perceptions of the performance of public services increase citizens' happiness.

Therefore, the following hypothesis can be defined as follows:

H2. Citizens' perception of the performance of public services has a positive influence on happiness.

The relationship between citizens' perceptions of the performance of public services and citizen satisfaction has been extensively analysed. For Pareja *et al.* (2016), the evaluation of public services should not focus on their efficiency or effectiveness, since what matters most is the opinions of the people who receive the service. Moliner and Berenguer (2001) explained that it is necessary to identify the variables that influence the individual satisfaction of each citizen, with the expectation of public services being one of the most important from a community point of view. Stiglitz (1987) discussed that both the well-being and life satisfaction of individuals are influenced by economic and social factors.

For Ono and Schultx (2020), the life satisfaction of each individual depends to a large extent on the political, economic and ideological actions of each country of residence and will only be achieved if the members of this society can satisfy their fundamental needs in order to have optimum levels of quality of life (Keyes, 1998). These fundamental needs for society are access to education, health, housing and security, among others (Vargas, 2020), considered by many citizens to be part of the welfare state that should be provided by public administrations (Calero, 2021). The perceived benefit of social services paid for by taxes has a positive influence on personal satisfaction (Novo *et al.*, 2020).

Therefore, the following hypothesis can be defined as follows:

H3. Citizens' perception of the functioning of public services has a positive influence on satisfaction.

We understand life satisfaction as "the degree to which a person evaluates the overall quality of his or her life as a whole in a positive way" (Veenhoven, 1994, p. 90). For his part, Pérez-Escoda (2013) defined it as "the personal perception of one's own life situation based on one's own goals, expectations, values and interests influenced by the cultural context of reference". In terms of happiness, this can be defined as "a state of satisfaction, more or less lasting, that an individual subjectively experiences in possession of a desired good" (Alarcón, 2006, p. 96) or "a feeling of satisfaction that a person, and only a person, experiences in his or her inner life" (Alarcón, 2015, p. 8). Happiness has been defined as "a construct that depends on the perception and meaning of human beings, a complex concept, individual and difficult to quantify because each individual constructs his or her own happiness from both sensory and material experiences and these are different depending on the person" (Ortega and Cortés, 2017, p. 59) and it has been defined as "the excess of the positive affective feelings over negative ones" (Ng, 2022, p. 1).

For Kahneman *et al.* (2006) it is more important to have high life satisfaction than to be happy, as this happiness can be short-lived. For Puig *et al.* (2011) people with a high level of happiness also have a high level of life satisfaction. Moyano and Ramos (2007), in their study, found a direct and moderate relationship between happiness and life satisfaction, and, although this relationship is clear, the authors explained that both concepts are not completely independent, but easily distinguishable. For De los Ríos (2016), happiness is a state of mind that generates satisfaction in the person. Other authors who found a direct relationship between happiness and satisfaction were Díaz *et al.* (2011), Moran *et al.* (2014), Matte *et al.* (2021) and Shkëmbi *et al.* (2022).

Therefore, the following hypothesis can be defined as follows:

H4. Happiness has a positive influence on satisfaction.

3. Research methodology

The research design involved an exploratory study with an in-depth literature review, followed by a cross-sectional descriptive study using the database obtained from the 2022 “Public opinion and fiscal policy” survey published by the Centro de Investigaciones Sociológicas (CIS).

The sample size is 2,543 Spanish citizens. For a confidence level of 95.5% (two sigmas) and $P = Q$, the sampling error is $\pm 2\%$ for the whole sample. The sampling procedure was simple random sampling by random selection of landline and mobile phones with a percentage of 29.2 and 70.8%, respectively. The selection of individuals was carried out by applying quotas for sex, age and proportional affiliation. The strata were formed by crossing the 17 autonomous communities and the two autonomous cities with the size of habitat, divided into seven categories: less than or equal to 2,000 inhabitants; from 2,001 to 10,000; from 10,001 to 50,000; from 50,001 to 100,000; from 100,001 to 400,000; from 400,001 to 1,000,000; and more than 1,000,000 inhabitants.

The fieldwork was carried out by the CIS between 21 and 30 July 2022, among the Spanish population of both sexes aged 18 and over. The questionnaires were applied by computer-assisted telephone interview (CATI).

The questionnaire includes multi-item measurement scales for all constructs of the proposed model (see [Tables 1–3](#)): four satisfaction items (the scale used for these four items was an eleven-point Likert-type response format, where respondents could rate the items from 0 ‘completely disagree’ to 10 ‘completely agree’), one happiness item ([Diamantopoulos et al., 2012](#)) (the scale used for these items was an eleven-point Likert-type response format, in which respondents could rate the items from 0 “strongly disagree” to 10 “strongly agree”), nine items for public service perception (The scale used for these nine items was a five-point Likert-type response format (The scale used for these nine items was a five-point Likert-type response format, where respondents could rate the items from 1 “not at all satisfied” to 5 “very satisfied”), and fifteen items for Use of taxes (The scale used was a three-point Likert-type response format, where respondents could rate the items from 1 “too many”, 2 “as many” to 3 “too few”).

In the SEM model, the observed variables used are formative and reflective (see [Figure 1](#)), so the partial least squares (PLS) approach has been applied to estimate the model ([Hair et al., 2011](#); [Wold, 2006](#)). There are two types of SEM, namely covariance-based (CB-SEM) and partial least squares (PLS-SEM). CB-SEMs are used in a confirmatory way to test a theory or to compare alternative theories while PLS-SEM is more appropriate in exploratory research

Construct	Items (reflectives)	Code	Factor loading	Cronbach's alpha	AVE	Composite reliability
Satisfaction	To what extent are you satisfied with			0.731	0.554	0.832
	your family life	P1_1	0.710			
	your health	P1_2	0.718			
	your social life	P1_3	0.795			
	your standard of living	P1_4	0.751			

Table 1.
Reflective
measurement model.
Constructs, items,
factor loading,
reliability and validity

Construct	Item	Code	Weights	VIF
Happiness	To what extent do you consider yourself a happy or unhappy person?	P2	1.000	1.000

Table 2.
Construct with only
one item

Construct	Item	Code	Weights	VIF
Perception public service	To what extent would you say each of the following public services function?			
	Public services?			
	Education	P6_1	0.011	1.275
	Health care	P6_2	0.162	1.266
	The management of pensions	P6_3	0.067	1.185
	Administration of justice	P6_4	0.150	1.211
	Public safety	P6_5	0.236	1.288
	Social services	P6_6	0.044	1.386
	Public transport	P6_7	0.322	1.163
Use of taxes	Public works	P6_8	0.260	1.263
	Aid to dependent persons	P6_9	0.424	1.245
	The different public administrations use the money we pay in taxes in Spain to finance public services and benefits			
	Education	P8_1	0.190	1.253
	Public works	P8_2	0.161	1.172
	Unemployment protection	P8_3	−0.065	1.179
	Defence	P8_4	−0.035	1.213
	Public safety	P8_5	0.350	1.216
	Health	P8_6	0.181	1.242
	Culture	P8_7	−0.007	1.274
	Housing	P8_8	0.023	1.158
	Justice	P8_9	0.073	1.101
	Social Security/Pensions	P8_10	0.154	1.228
	Transport and communications	P8_11	0.400	1.122
	Environmental protection	P8_12	−0.085	1.214
	Development cooperation	P8_13	−0.039	1.241
	Research in science and technology	P8_14	0.034	1.097
	Aid to dependent persons	P8_15	0.432	1.137

Table 3.
Formative
measurement model.
Constructs, items,
weights and VIF

such as the one developed in this paper. PLS-SEM is also more appropriate for prediction and explanation of key constructs and also when there are formatively measured constructs in the structural model (Rigdon, 2012). For this purpose, the software used was SmartPLS 3.3.9 (Ringle et al, 2015).

4. Findings

4.1 Measurement model: reliability and validity

PLS-SEM allows us to advance our knowledge of the management of public services. SEM is a multivariate statistical technique that allows the simultaneous examination of relationships between observable and latent variables, as well as between latent variables (Hair et al., 2019).

Analysing the proposed model (see Figure 1), there are five different constructs, where “Satisfaction” consists of reflective items, “Happiness” consists of only one item and the rest of the constructs consist of formative items. When assessing measurement models, a distinction must be made between constructs measured reflectively and formatively and therefore need different modes of assessment (Hair et al., 2012).

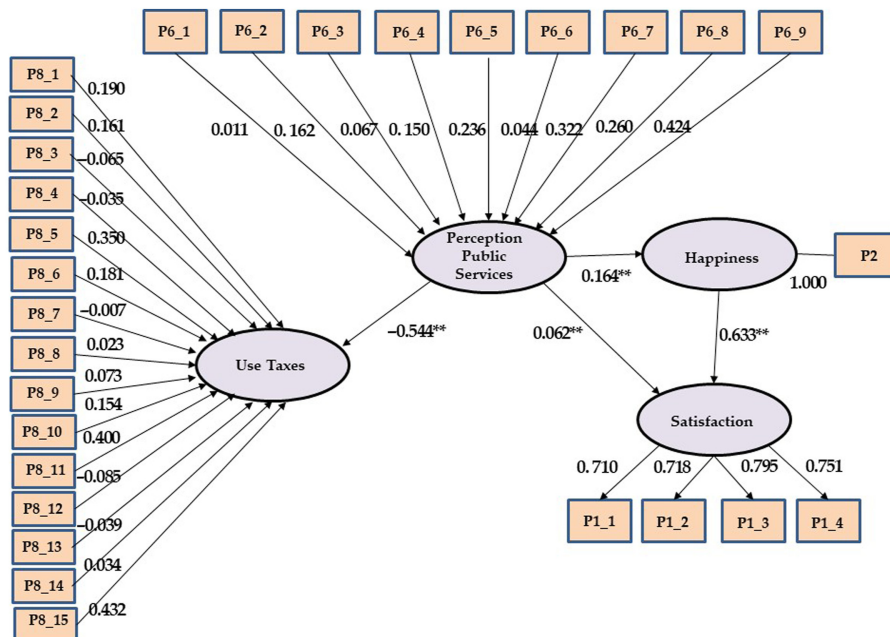
In relation to the reflective items (see Table 1), factor loadings, reliability and discriminant validity are assessed to determine the fit of the model. To assess the factor loadings or reliability of the indicators, we examine how each item is related to the latent constructs. The external loadings of the reflective constructs are above the threshold value of 0.707, at which indicator reliability can be obtained (Hair et al., 2011). In this study, all four items reach this

acceptable level of reliability because their loadings exceed 0.7 and they load more on their own construct than on others. These results provide good support for the reliability of reflective measures. To assess convergent validity the average variance extracted (AVE) is used and a value at least equal to 0.5 is recommended, which means that a construct explains more than half of the variance of its indicators (Hu and Bentler, 1999). This recommendation is fulfilled for the construct Satisfaction.

To measure internal consistency reliability, Cronbach's alpha is used, which provides an estimate of reliability based on the intercorrelations of the observed indicator variables. Additionally, Composite Reliability (CR) is used to measure internal consistency reliability. Nunnally and Bernstein (1994) suggest 0.70 as a benchmark for reasonable reliability for Cronbach's alpha and the CR. In this case, all constructs exceed the recommended cut-off values for both measures. As for the rho_A all reflective variables also exceed the threshold of 0.7.

The assessment of discriminant validity informs us of the degree to which a construct is truly distinct from other constructs (Hair *et al.*, 2019). Traditionally, the Fornell-Larcker (1981) criterion is used and suggests that each construct is more strongly related to its own measures than to measures of other constructs. Additionally, Henseler *et al.* (2015) propose to assess the heterotrait-monotrait ratio of correlations (HTMT) which is an estimate of what the actual correlation between two constructs would be if they were measured in a perfect way. If the HTMT value is less than 0.90, discriminant validity between two reflective constructs has been established. All HTMT coefficients in the study have a value below 0.9, and the square root of the AVE is greater than the correlation between the constructs (Fornell and Larcker, 1981). Thus, both conditions are fulfilled for all items.

In relation to the formative items (see Table 3 and Figure 2) the weights and the collinearity statistic (VIF) of the external model are evaluated. For there to be no problem of collinearity, the VIF values have to be less than 5, and this condition is fulfilled for all the



Note(s): * $p < 0.05$, ** $p < 0.01$

Figure 2.
Results

items. As for the weights, when a large number of formative indicators is used to measure a construct, it is more likely that the weights are low and even non-significant (Centenelli and Bassellier, 2009). Thus, the public services that best contribute to a better perception of satisfaction with the way they function are: Aid to dependent persons (P6_9) with a weight of 0.424; Public transport (P6_7) with 0.322; Public works (P6_8) with 0.260; Public safety (P6_5) with 0.236; Health care (P6_2) with 0.162; Administration of justice (P6_4) with 0.150, while it can be said that their contribution is not significant in: Pension management (P6_3) with 0.067; Social services (P6_6) with 0.044 and Education (P6_1) with 0.011. In addition, public administrations allocate taxes to finance public services and benefits, known in the model as “Use of taxes”, and in this variable, the services with the greatest weight are: Aid to dependent persons (P8_15) with a weight of 0.432; Transport and Communications (P8_11) with 0.400; Public safety (P8_5) with 0.350; Education (P8_1) with 0.190; Health (P8_6) with 0.181; Public works (P8_2) with 0.161; Social Security/Pensions (P8_10) with 0.154; Environmental protection (P8_12) with -0.085 ; Unemployment protection (P8_3) with -0.065 ; and Justice (P8_9) with 0.073; but their contribution is not significant in Defence (P8_4); Development Cooperation (P8_13); Science and Technology Research (P8_14); Housing (P8_8); and Culture (P8_7).

4.2 Structural model: goodness of fit statistics

To assess the structural model Henseler *et al.* (2014) introduce the standardised root mean square residual (SRMR) as a goodness-of-fit measure for the PLS-SEM. The standardised SRMR is defined as the difference between the observed correlation and the implied correlation matrix of the model (Dijkstra and Henseler, 2015). A value below 0.10 is considered to indicate a good fit to the data (Hu and Bentler, 1999). For this model, the SRMR is 0.045, suggesting a good model fit. The model results also suggest that the dimensions explain a large amount of variance in the endogenous variables satisfaction and taxa utility with R2 values of 0.417 and 0.296, respectively, while for Happiness it is only 0.027. The Stone-Geisser (Q2) results for the constructs are for Perception of public services is 0.140, for Satisfaction is 0.262, for Use of taxes is 0.036 and for Happiness is 1.000, where values greater than zero indicate a good predictive relevance of the model.

4.3 Results of SEM

The conceptual model results (see Figure 2) show how Perception of public services is related to Use of taxes. With a coefficient of -0.544 , the results suggest that Perception of public services negatively and significantly influences the Use of taxes. This means that the lower the perception of satisfaction with public services, the higher the perception that taxes for public services are too low. So, hypothesis H1 is not rejected (see Tables 4 and 5).

There is a positive relationship between the perception of public services and citizens' happiness, although the results show that this relationship is low. Therefore, it can be

Table 4.
Total effect

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	p values
Perception public services → Use taxes	−0.544	−0.551	0.015	36.313	0.000
Perception public services → Happiness	0.164	0.167	0.024	6.800	0.000
Perception public services → Satisfaction	0.062	0.063	0.017	3.756	0.000
Happiness → Satisfaction	0.633	0.633	0.019	33.990	0.000

affirmed that a higher satisfaction with the functioning of public services contributes positively to citizens' happiness. Therefore, hypothesis H2 is not rejected.

The relationship between perception of public services and satisfaction is positive, although very weak. Therefore, hypothesis H3 is not rejected.

The positive and significant relationship between happiness and satisfaction stands out. Thus, the more Spanish citizens consider themselves to be happy, the greater the influence on their satisfaction with their family life, their health, their social life and their standard of living. Therefore, hypothesis H4 is not rejected.

Finally, if we analyse the results of the total indirect effects (Table 6), we can see that there is a low relationship between the utility of public service charges and satisfaction with public services.

5. Discussion and conclusions

5.1 Theoretical implications

From the SEM model validated in this work, progress has been made in the literature in the sense that it allows to measure the perception of the performance of public services and its influence on the utility of tax payments for public services, as well as on citizens' happiness and satisfaction, which implies improving the welfare state and ensuring national prosperity.

According to the results, firstly, the public services that best contribute to a better perception in terms of satisfaction with the performance of public services are assistance to dependent persons, public transport, public works, public safety, healthcare and the administration of justice. However, improvements should be made in the performance of pension management, social services and education. Secondly, this paper contributes to knowledge on public marketing to ensure collective functionality taking into account available resources (Kadirov, 2018; Penelas *et al.*, 2023; Wesselmann and Hohn, 2017). Thirdly, higher satisfaction as a consequence of improvements in service quality will make public sector organisations more efficient, reducing the need for tax revenues, which can contribute to making Spanish public services and industry more competitive (Alemán *et al.*, 2018).

5.2 Managerial implications

Public administrations allocate taxes to finance public services and benefits, and in this variable, the services that have the greatest weight are as follows: Aid to dependent persons;

Hypothesis	Content	Verification
H1	Citizens' perception of the performance of public services has a strong influence on Use of taxes on public services	Supported
H2	Citizens' perception of the performance of public services has a positive influence on Happiness	Supported
H3	Citizens' perception of the performance of public services has a positive influence on Satisfaction	Supported
H4	Happiness has a positive influence on Satisfaction	Supported

Table 5.
Summary of
hypothesis verification

	Total indirect effects
Perception public services → Satisfaction	0.104**

Note(s): ¹ * Significant path coefficients (at $p < 0.05$)

² ** Significant path coefficients (at $p < 0.01$)

Table 6.
Total indirect effects

Transport and communications; Public safety; Education; Health; Public works; Social Security/Pensions; Environmental protection; Unemployment protection and Justice. In contrast, the results suggest that Perception of public service significantly and negatively influences the Use of taxes, which means that, despite high perceived satisfaction with the above public services, taxes for these public services are considered to be very low. On the other hand, the use of taxes in Defence, Development Cooperation, Research in Science and Technology, Housing and in Culture their contribution is not significant, since citizens already consider that enough taxes are spent on them.

These results are in line with other previous works in which they argue that, in times of crisis, public spending cuts in some countries such as France, Ireland and the United Kingdom have opted to protect health and education services from spending, while countries such as Italy and Spain have cut spending deeply (Bozio *et al.*, 2015).

Therefore, this model contributes to the management of taxes in order to protect public spending in times of economic recession, of the most highest priority public services such as health and education. In this way, the model validated in this work contributes to a more efficient allocation of taxes to the most highest priority services for citizens.

5.3 Social implications

In terms of social implications, the model shows that higher satisfaction with the performance of public services contributes positively to citizens' happiness. Thus, this paper contributes to citizens' happiness along the same lines as previous work (Gong and Yi, 2018), which argues that consumer happiness is affected by service quality.

Thus, greater satisfaction with the functioning of public services contributes positively to citizen satisfaction. This contribution is in line with the work of Alemán *et al.* (2018) in which they argued that the more/better transactions citizens enjoy with public services, the more satisfied the population will be. Moreover, the relationship between citizens' obligation to pay taxes and the right to use public services is generally accepted, so this paper contributes along the same lines as previous work arguing that citizens should be taken as customers and treated in a satisfactory way (Alford and Yates, 2015; Mintzberg, 2009). Such an orientation is adopted in some societies such as the UK, Canada and USA (Alemán *et al.*, 2018). Therefore, this work contributes to this orientation being extended to Spain as well.

In line with previous studies (Gamble and Gärling, 2012; Peterson *et al.*, 2005), this paper shows that higher levels of happiness lead to higher levels of citizen satisfaction, which is reflected in higher satisfaction with family life, health, social life and standard of living. Past work considers subjective well-being and life satisfaction to be synonymous with happiness (Diener, 2000; Layard, 2006). However, more current work argues that life satisfaction is a reflection of happiness (Botha and Booyesen, 2014; Ngamaba and Soni, 2018; Núñez-Barriopedro *et al.*, 2020). Thus, the present model contributes in the same direction.

5.4 Limitations and future research

Among the limitations of this study is that it is a cross-sectional study at a time of economic recession so that future work could carry out a longitudinal study with periods of economic expansion to see if the economic context of the country can influence the model. Another limitation may be that the geographical scope of this work is Spain, so future work could be extended to a European or international geographical scope. Finally, another possible line of research for future work could be to extend the model and add other public opinion variables.

References

- Adelantado, J. (2017), "Reestructuración de los Estados del Bienestar ¿Hacia un cambio de paradigma?", *Argum*, Vol. 9 No. 2, pp. 38-52, doi: [10.18315/argum.v9i2.16163](https://doi.org/10.18315/argum.v9i2.16163).

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- Alarcón, R. (2006), "Desarrollo de una escala factorial para medir la felicidad", *Revista Interamericana de Psicología*, Vol. 40 No. 1, pp. 95-102.
- Alarcón, R. (2015), "La idea de felicidad", *Apuntes de Ciencia & Sociedad*, Vol. 5 No. 1, pp. 6-9, doi: [10.18259/acs.2015002](https://doi.org/10.18259/acs.2015002).
- Alemán, R., Gutiérrez-Sánchez, R. and Liébana-Cabanillas, F. (2018), "Determinant factors of satisfaction with public services in Spain", *Australian Journal of Public Administration*, Vol. 77 No. 1, pp. 102-113, doi: [10.1111/1467-8500.12252](https://doi.org/10.1111/1467-8500.12252).
- Alford, J. and Yates, S. (2015), "Co-production of public services in Australia: the roles of government organisations and Co-producers", *Australian Journal of Public Administration*, Vol. 75 No. 2, pp. 159-175, doi: [10.1111/1467-8500.12157](https://doi.org/10.1111/1467-8500.12157).
- Alm, J. and Gomez, J.L. (2008), "Social capital and tax morale in Spain", *Economic Analysis and Policy*, Vol. 38 No. 1, pp. 73-87, doi: [10.1016/S0313-5926\(08\)50007-5](https://doi.org/10.1016/S0313-5926(08)50007-5).
- Bergqvist, K., Yngwe, M.A. and y Olle, L. (2013), "Understanding the role of welfare state characteristics for health and inequalities—an analytical review", *BMC Public Health*, Vol. 13, pp. 1-20.
- Botha, F. and Booysen, F. (2014), "Family functioning and life satisfaction and happiness in South African households", *Social Indicators Research*, Vol. 119 No. 1, pp. 163-182, doi: [10.1007/s11205-013-0485-6](https://doi.org/10.1007/s11205-013-0485-6).
- Bozio, A., Emmerson, C., Peichl, A. and Tetlow, G. (2015), "European public finances and the great recession: France, Germany, Ireland, Italy, Spain and the United Kingdom compared", *Fiscal Studies*, Vol. 36 No. 4, pp. 405-430, doi: [10.1111/j.1475-5890.2015.12078](https://doi.org/10.1111/j.1475-5890.2015.12078).
- Calero, J. (2021), "El estado del bienestar español: valoración y perspectivas de futuro", *Arancaria. Revista Iberoamericana de Filosofía, Política, Humanidades y Relaciones Internacionales*, Vol. 47, pp. 457-478, doi: [10.12795/araucaria.2021.147.20](https://doi.org/10.12795/araucaria.2021.147.20).
- Cazes, S. (1985), *El Estado protector obligado a una doble maniobra*, Ministerio de Trabajo y Seguridad Social, Madrid.
- Cenfetelli, R.T. and Bassellier, G. (2009), "Interpretation of formative measurement in information systems research", *MIS Quarterly*, Vol. 33 No. 4, pp. 689-707, doi: [10.2307/20650323](https://doi.org/10.2307/20650323).
- De los Ríos, A.L. (2016), "Felicidad y economía: la felicidad como utilidad en la economía", *Equidad & Desarrollo*, Vol. 26, pp. 115-143, doi: [10.19052/ed.3700](https://doi.org/10.19052/ed.3700).
- De Prycker, V. (2010), "Happiness on the political agenda? PROS and CONS", *Journal of Happiness Studies*, Vol. 11 No. 5, pp. 585-603.
- Del Pino, E. (2007), "Las actitudes de los españoles hacia la reforma del Estado de Bienestar", *Política Y Sociedad*, Vol. 44 No. 2, pp. 185-208.
- Díaz, R., Portela, M. and y Neira, I. (2011), "Bienestar y felicidad: relación con la renta y el capital social en países europeos", *Revista Galega de Economía*, Vol. 20, pp. 1-29.
- Diamantopoulos, A., Sarstedt, M., Fuchs, C., Wilczynski, P. and Kaiser, S. (2012), "Guidelines for choosing between multi-item and single-item scales for construct measurement: a predictive validity perspective", *Journal of the Academy of Marketing Science*, Vol. 40 No. 3, pp. 434-449, doi: [10.1007/s11747-011-0300-3](https://doi.org/10.1007/s11747-011-0300-3).
- Diener, E. (2000), "Subjective well-being: the science of happiness and a proposal for a national index", *American Psychologist*, Vol. 55 No. 1, pp. 34-43, doi: [10.1037/0003-066X.55.1.34](https://doi.org/10.1037/0003-066X.55.1.34).
- Dijkstra, T.K. and Henseler, J. (2015), "Consistent partial least squares path modeling", *MIS Quarterly*, Vol. 39 No. 2, pp. 297-316.
- Dirección General de Gobernanza Pública (2019), *Informe sobre la percepción ciudadana de los servicios Públicos. La confianza en las instituciones*, Ministerio de Política Territorial y Función Pública.
- Duncan, G. (2010), "Should happiness-maximization be the goal of government?", *Journal of Happiness Studies*, Vol. 11 No. 2, pp. 163-178.

- Easterlin, R.A. (2013), "Happiness, growth, and public policy", *Economic Inquiry*, Vol. 51 No. 1, pp. 1-28.
- Espenshade, T.J. and Calhoun, C.A. (1993), "An analysis of public opinion toward undocumented immigration", *Population Research and Policy Review*, Vol. 12 No. 3, pp. 189-224, doi: [10.1007/BF01074385](https://doi.org/10.1007/BF01074385).
- Feld, L.P. and Frey, B.S. (2007), "Tax compliance as the result of a psychological tax contract: the role of incentives and responsive regulation", *Law & Policy*, Vol. 29 No. 1, pp. 102-120.
- Fernández-Albertos, J. and Kuo, A. (2016), "Economic hardship and policy preferences in the eurozone periphery: evidence from Spain", *Comparative Political Studies*, Vol. 49 No. 7, pp. 874-906, doi: [10.1177/0010414016633224](https://doi.org/10.1177/0010414016633224).
- Flora, P. and Alber, J. (1981), *Modernization, Democratization, and the Development of Welfare States in Western Europe*, Transaction Books, London.
- Florida, R., Mellander, C. and Rentfrow, P.J. (2013), "The happiness of cities", *Regional Studies*, Vol. 47 No. 4, pp. 613-627.
- Fornell, C. and Larcker, D.F. (1981), "Evaluating structural equation models with unobservable variables and measurement error", *Journal of Marketing Research*, Vol. 18 No. 1, pp. 39-50, doi: [10.2307/3151312](https://doi.org/10.2307/3151312).
- Frey, B.S. and Stutzer, A. (2018), *Economics of Happiness*, Springer, Cham.
- Frey, B. and Torgler, B. (2006), "Tax morale and conditional cooperation", *Journal of Comparative Economics*, Vol. 35 No. 1, pp. 136-159.
- Fu, Y.K. and Wang, Y.J. (2020), "Experiential value influences authentic happiness and behavioural intention: lessons from Taiwan's tourism accommodation sector", *Tourism Review*, Vol. 76 No. 1, pp. 289-303, doi: [10.1108/TR-06-2019-0228](https://doi.org/10.1108/TR-06-2019-0228).
- Gamble, A. and Gärling, T. (2012), "The relationships between life satisfaction, happiness, and current mood", *Journal of Happiness Studies*, Vol. 13 No. 1, pp. 31-45, doi: [10.1007/s10902-011-9248-8](https://doi.org/10.1007/s10902-011-9248-8).
- Goenaga Ruiz de Zuazu, M. (2017), *Opinión pública fiscal y medios de comunicación en España*, Universidad Complutense de Madrid, Madrid.
- Goenaga Ruiz de Zuazu, M. (2018), "Opinión pública fiscal y medios de comunicación en España", Dissertation.
- Gong, T. and Yi, Y. (2018), "The effect of service quality on customer satisfaction, loyalty, and happiness in five Asian countries", *Psychology & Marketing*, Vol. 35 No. 6, pp. 427-442, doi: [10.1002/mar.21096](https://doi.org/10.1002/mar.21096).
- González, J.J. and Bouza, F. (2009), *Las razones del voto en la España democrática (1977-2008)*, Catarata, Madrid.
- González, B. and y Carrera, E. (2012), "Los límites de la lealtad ideológica en la evaluación ciudadana del 'performance' administrativo local", *Papers. Revista de Sociología*, Vol. 97 No. 4, pp. 719-749, doi: [10.5565/rev/papers/v97n4.359](https://doi.org/10.5565/rev/papers/v97n4.359).
- Grönroos, C. (1984), "A Service quality model and its marketing implications", *European Journal of Marketing*, Vol. 18 No. 4, pp. 36-44, doi: [10.1108/EUM000000004784](https://doi.org/10.1108/EUM000000004784).
- Hair, J.F., Ringle, C.M. and Sarstedt, M. (2011), "PLS-SEM: indeed a silver bullet", *Journal of Marketing Theory and Practice*, Vol. 19 No. 2, pp. 139-152, doi: [10.2753/MTP1069-6679190202](https://doi.org/10.2753/MTP1069-6679190202).
- Hair, J.F., Sarstedt, M., Ringle, C.M. and Mena, J.A. (2012), "An assessment of the use of partial least squares structural equation modeling in marketing research", *Journal of the Academy of Marketing Science*, Vol. 40 No. 3, pp. 414-433, doi: [10.1007/s11747-011-0261-6](https://doi.org/10.1007/s11747-011-0261-6).
- Hair, J.F., Hult, G.T.M., Ringle, C.M., Sarstedt, M., Castillo Apraiz, J., Cepeda Carrión, G. and Roldán, J.L. (2019), "Manual de partial least squares structural equation modeling (pls-sem)", *OmniaScience Scholar*, Vol. 2, pp. 65-115, doi: [10.3926/oss.37](https://doi.org/10.3926/oss.37).
- Hatton, T.J. (2016), "Immigration, public opinion and the recession in Europe", *Economic Policy*, Vol. 31 No. 86, pp. 205-246, doi: [10.1093/epolic/eiw004](https://doi.org/10.1093/epolic/eiw004).

-
- Henseler, J., Dijkstra, T.K., Sarstedt, M., Ringle, C.M., Diamantopoulos, A., Straub, D.W., Ketchen, D.J., Jr, Hair, J.F., Hult, G.T.M. and Calantone, R.J. (2014), "Common beliefs and reality about PLS: comments on Rönkkö & Evermann (2013)", *Organizational Research Methods*, Vol. 17 No. 2, pp. 182-209, doi: [10.1177/1094428114526928](https://doi.org/10.1177/1094428114526928).
- Henseler, J., Ringle, C.M. and Sarstedt, M. (2015), "A new criterion for assessing discriminant validity in variance-based structural equation modeling", *Journal of the Academy of Marketing Science*, Vol. 43 No. 1, pp. 115-135, doi: [10.1007/s11747-014-0403-8](https://doi.org/10.1007/s11747-014-0403-8).
- Herrero, C., Villar, A. and y Soler, A. (2018), *Las facetas del bienestar. Una aproximación multidimensional a la calidad de vida en España y sus comunidades autónomas*, Fundación BBVA, Madrid.
- Hu, L. and Bentler, P. (1999), "Cutoff criteria for fit indices in covariance structure analysis: conventional criteria versus new alternatives", *Structural Equation Modeling*, Vol. 6 No. 1, pp. 1-55, doi: [10.1080/10705519909540118](https://doi.org/10.1080/10705519909540118).
- Instituto de Estudios Fiscales (2020), *Opiniones y actitudes fiscales de los españoles en 2019*, Documento de Trabajo 9/2020, Ministerio de Hacienda, available at: https://www.ief.es/docs/destacados/publicaciones/documentos_trabajo/2020_09.pdf.
- Kadirov, D. (2018), "Towards a theory of marketing systems as the public Good", *Journal of Macromarketing*, Vol. 38 No. 3, pp. 278-297, doi: [10.1177/0276146718767949](https://doi.org/10.1177/0276146718767949).
- Kahneman, D., Krueger, A.B., Schkade, D., Schwarz, N. and y Stone, A.A. (2006), "Would you be happier if you were richer? A focusing illusion", *Science*, Vol. 312, pp. 1908-1910, doi: [10.1126/science.1129688](https://doi.org/10.1126/science.1129688).
- Keyes, C.L. (1998), "Social well-being", *Social Psychology Quarterly*, Vol. 61 No. 2, pp. 121-140, doi: [10.2307/2787065](https://doi.org/10.2307/2787065).
- Layard, R. (2006), "Happiness and public policy: a challenge to the profession", *Economic Journal*, Vol. 116 No. 510, pp. 24-33.
- María-Dolores, R., Alarcón, G. and Garre, M.E. (2010), "Tax morale in Spain: a study into some of its principal determinants", *Journal of Economic Issues*, Vol. 44 No. 4, pp. 855-876, doi: [10.2753/JEI0021-3624440401](https://doi.org/10.2753/JEI0021-3624440401).
- Martínez, M.J.C., Martínez, M.R., García, J.C., Cortés, M.I.O., Ferrer, A.R. and Herrero, B.T. (2004), "Fiabilidad y validez de una Escala de Satisfacción con la Vida de Diener en una muestra de mujeres embarazadas y puerperas", *Psicothema*, Vol. 16 No. 3, pp. 448-455.
- Matte, J., Fachinelli, A.C., De Toni, D. and Olea, P.M. (2021), "Relationships between minimalism, happiness, life satisfaction, and experiential consumption", *SN Social Sciences*, Vol. 1 No. 166, pp. 1-22, doi: [10.1007/s43545-021-00191-w](https://doi.org/10.1007/s43545-021-00191-w).
- McDonough, P., Barnes, S.H. and Pina, A.L. (1986), "Economic policy and public opinion in Spain", *American Journal of Political Science*, Vol. 30 No. 2, pp. 446-479, doi: [10.2307/2111104](https://doi.org/10.2307/2111104).
- Mintzberg, H. (2009), "Rebuilding companies as communities", *Harvard Business Review*, Vol. 87 Nos 7/8, pp. 140-143.
- Moliner, B. and Berenguer, G. (2001), "El efecto de la satisfacción del cliente en la lealtad: aplicación en establecimientos minoristas", *Cuadernos de Administración*, Vol. 24 No. 42, pp. 101-124.
- Monereo, J.L. (1995), "La política social en el Estado del bienestar: los derechos sociales de la ciudadanía como derechos de "desmercantilización", *Revista de Trabajo y Seguridad Social*, Septiembre 1995, pp. 164-165.
- Morán, C., Vicente, F., Sánchez, A. and y Montes, E. (2014), "Psicología positiva. Antigua o nueva concepción", *International Journal of Developmental and Educational Psychology*, Vol. 3 No. 1, pp. 439-450.
- Moreno, L. (2003), *Ciudadanía, desigualdad social y Estado de Bienestar*, working paper, 03-08, Unidad de Políticas Comparadas (CSIC), Madrid.

- Moreno, L. (2004), "Reforma y reestructuración del Estado del Bienestar en la Unión Europea", in Boschetti, I., Amazoneida, P., César, M.A. and Bomtempo, D. (Eds), *Política Social: Alternativas ao Neoliberalismo*, Programa de Pós-graduação em Política Social da Universidade de Brasília, Brasil.
- Moyano, E. and y Ramos, N. (2007), "Bienestar subjetivo: midiendo satisfacción vital, felicidad y salud en población chilena de la región de Maule", *Revista UNIVERSUM*, Vol. 22 No. 2, pp. 185-200.
- Ng, Y.-K. (2022), *Happiness-Concept, Measurement and Promotion*, Springer, Singapore.
- Ngamaba, K.H. and Soni, D. (2018), "Are happiness and life satisfaction different across religious groups? Exploring determinants of happiness and life satisfaction", *Journal of Religion and Health*, Vol. 57 No. 6, pp. 2118-2139, doi: [10.1007/s10943-017-0481-2](https://doi.org/10.1007/s10943-017-0481-2).
- Novo, I., Díaz, C. and Ruesga, S.M. (2020), "Fiscal pressure and fraud, predisposition to pay taxes and personal satisfaction in Spain", *Revista Española de Investigaciones Sociológicas*, Vol. 172, pp. 101-120, doi: [10.5477/cis/reis.172.101](https://doi.org/10.5477/cis/reis.172.101).
- Núñez-Barriopedro, E., Ravina-Ripoll, R. and Ahumada-Tello, E. (2020), "Happiness perception in Spain, a SEM approach to evidence from the sociological research center", *Quality & Quantity*, Vol. 54 No. 3, pp. 761-779, doi: [10.1007/s11135-019-00955-w](https://doi.org/10.1007/s11135-019-00955-w).
- Nunnally, J.C. and Bernstein, I.H. (1994), "The assessment of reliability", *Psychometric Theory*, Vol. 3, pp. 248-292.
- Ono, H. and Schultz, K. (2020), "Redistributing Happiness: How Social Policies Shape Life Satisfaction", *Japan Spotlight*, July/August 2020, pp. 60-63.
- Ortega, M. and y Cortés, G. (2017), "Welfare state, happiness, and production in the EU", *Revista de Estudios Empresariales*, Vol. 1, pp. 55-78, doi: [10.17561/ree.v0i1.3188](https://doi.org/10.17561/ree.v0i1.3188).
- Pareja, A., Fernández, C., Blanco, B., Theobald, K. and Martínez, A. (2016), *Simplifying Lives. Quality and Satisfaction in Public Services*, Inter-American Development Bank, Washington.
- Pérez-Escoda, N. (2013), "Variables predictivas de la satisfacción con la vida en estudiantes universitarios", *Comunicación presentada al XVI Congreso Nacional/II Internacional Modelos de Investigación Educativa de AIDIPE*, Alicante, 4-6 septiembre.
- Penelas-Leguía, A., Núñez-Barriopedro, E., López-Sanz, J.M. and Ravina-Ripoll, R. (2023), "Polarisation of Spanish politicians through their Twitter posts versus polarisation of Spanish public opinion", *Politics and Governance*, (ahead-of-print).
- Peterson, C., Park, N. and Seligman, M.E.P. (2005), "Orientations to happiness and life satisfaction: the full life versus the empty life", *Journal of Happiness Studies*, Vol. 6 No. 1, pp. 25-41, doi: [10.1007/s10902-004-1278-z](https://doi.org/10.1007/s10902-004-1278-z).
- Puig, M., Rodríguez, N., Farrás, J. and y Lluch, M.T. (2011), "Calidad de vida, felicidad y satisfacción con la vida en personas ancianas de 75 años atendidas en un programa de atención domiciliaria", *Revista Latino-Americana de Enfermagem*, Vol. 19 No. 3, pp. 1-8.
- Rigdon, E.E. (2012), "Rethinking partial least squares path modeling: in praise of simple methods", *Long Range Planning*, Vol. 45 Nos 5-6, pp. 341-358.
- Ringle, C.M., Wende, S. and Becker, J.-M. (2015), *SmartPLS 3*, SmartPLS. GmbH, Bönningstedt, Vol. 584.
- Rueda, N. (2011), "La eficiencia y su importancia en el sector público", *eXtoikos*, Vol. 1, pp. 38-47.
- Sánchez, O.C. (2021), "Los efectos de la pandemia de la COVID-19 en la distribución de la renta y el papel de las políticas públicas", *Información Comercial Española, ICE: Revista de economía*, Vol. 923, pp. 145-161.
- Serrano, F. (2010), "Las tasas de prestación de servicios y realización de actividades administrativas en la Hacienda Local", *Anuario Aragonés del Gobierno Local*, Vol. 1, pp. 263-321.
- Shkëmbi, F., Collaku, M. and Caushaj, R. (2022), "The relationships between happiness, the meaning of life and satisfaction with life", *Proceedings of The Third International Scientific Conference "Happiness and Contemporary Society"*, Ukrainian Institute for Happiness Research. Kiev.

-
- Stiglitz, J.E. (1987), "Pareto efficient and optimal taxation and the new welfare economics", *Handbook of Public Economics*, pp. 991-1042, No. 2.
- Torregrosa Hetland, S. (2021), "An assessment of the tax reform", *The Spanish Fiscal Transition*, Palgrave Macmillan, Cham, pp. 185-213, doi: [10.1007/978-3-030-79541-2_7](https://doi.org/10.1007/978-3-030-79541-2_7).
- Vargas, B.I. (2020), "Bienestar social, satisfacción de la vida y características personales de violencia", *Revista Especializada en Ciencias de la Salud*, Vol. 23 Nos 1-2, pp. 22-30.
- Veenhoven, R. (1994), "El estudio de la satisfacción con la vida", *Intervención Psicosocial*, Vol. 3, pp. 87-116.
- Veenhoven, R. (2009), "Measures of gross national happiness", *Psychosocial Intervention*, Vol. 18 No. 3, pp. 1-31, doi: [10.5093/in2009v18n3a8](https://doi.org/10.5093/in2009v18n3a8).
- Wesselmann, S. and Hohn, B. (2017), *Public Marketing*, Springer Fachmedien Wiesbaden, Wiesbaden.
- Wold, H. (2006), "Partial least squares", *Encyclopedia of Statistical Sciences*, John Wiley & Sons, Nueva Jersey, Vol. 9.
- Wu, Y. and Zhu, J. (2016), "When are people unhappy? Corruption experience, environment, and life satisfaction in Mainland China", *Journal of Happiness Studies*, Vol. 17 No. 3, pp. 1125-1147, doi: [10.1007/s10902-015-9635-7](https://doi.org/10.1007/s10902-015-9635-7).

Further reading

- Fernández, A.M. (2020), "Un acercamiento a la felicidad, la política y las políticas públicas", *TLATEMOANI, Revista Académica de Investigación*, Vol. 34, pp. 110-131.
- McDonald, R.P. and Ho, M.-H.R. (2002), "Principles and practice in reporting structural equation analyses", *Psychological Methods*, Vol. 7 No. 1, pp. 64-82, doi: [10.1037/1082-989X.7.1.64](https://doi.org/10.1037/1082-989X.7.1.64).
- Ministerio de Hacienda y Administraciones Públicas (2012), *La importancia de los servicios públicos en el bienestar de los ciudadanos*, Agencia Estatal de Evaluación de las Políticas Públicas y la Calidad de los Servicios, Madrid.

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