



# The Impact of Citizens' Satisfaction with National-level Institutions and Conditions on Their Subjective Wellbeing: Evidence from 137 Countries

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## Abstract

This study develops and tests a model of subjective indicators of national wellbeing that can be applied across countries worldwide. Using data from over 160,000 respondents in 137 countries from the 2019 Gallup World Poll, we examine how citizens' satisfaction with national institutions and various environments (physical, political, economic, and social) affects their subjective wellbeing. Based on bottom-up spillover theory, we hypothesize that satisfaction with concrete country conditions affects overall life satisfaction and affective wellbeing. Results from Bayesian multilevel modeling support our hypotheses and show significant positive relationships between citizens' satisfaction with national institutions, political, economic, and social environments and their subjective well-being. Satisfaction with the physical environment showed no significant effect in the full model but was significant when analyzed separately. This research provides a comprehensive framework for understanding the factors that influence national wellbeing in different global contexts and offers fresh insights for policymakers and researchers in assessing and improving quality of life at the national level.

**Keywords** National wellbeing · Subjective wellbeing · Gallup world poll

## Background

National happiness has become an operational objective for governments and policymakers given the consensus that a country's success needs to be evaluated based on the happiness of its people (e.g., Diener & Tov, 2012; Helliwell et al., 2023; Schmidt-Traub et al., 2017). This is consistent with the trend that many public policymakers are increasingly complementing economic indicators with social indicators of varying degrees of comprehensiveness, such as the HDI (Human Development Index)

Extended author information available on the last page of the article

and the Global Competitiveness Index (GCI), in managing the quality of life of their countries. For example, HDI comprises health, education, and standard of living (UNDP, 2024), while GCI is composed of twelve competitiveness pillars (public and private institutions, infrastructure, macroeconomic environment, innovation, business sophistication, market size, technological readiness, financial market development, health and primary education, higher education and training, goods market efficiency, and labor market efficiency) (Qazi, 2024).

According to Diener and Tov (2012), measurements for narrowly defined experiences, compared to those for capturing overall life satisfaction, could generate specific information for improving quality of life (p. 4). Also, they argued that for wellbeing measures to be useful for public policies, the measures need to (1) assess factors that are seen as a legitimate concern of the government, (2) concern subjective states that are amenable to influence by government policies, and (3) capture patterns that are not fully reflected in economic and social indicators.

In this paper, we focus on subjective indicators that measure the quality of nation-level institutions and conditions, which in turn affect one's subjective wellbeing. To do so, we start by reviewing major instruments for measuring national quality of life while describing their role in subjective indicators of personal wellbeing, after which we make the case for our theoretical model and how it contributes to the research literature.

### **Subjective Indicators that Capture National Wellbeing and Impact Subjective Wellbeing**

Based on social identity theory, Morrison et al. (2011) demonstrated that national wellbeing (i.e., satisfaction with one's country) contributes to one's overall life satisfaction, and this relationship is stronger for those in countries that are less economically developed (mostly western countries). In this study, national wellbeing was assessed by asking respondents to rate their past, present, and future satisfaction with their country.

Unlike this holistic measure of national wellbeing, the Australian Unity Wellbeing Index (Cummins et al., 2003) was designed to capture both personal and national wellbeing. While the personal well-being measure (the Personal Wellbeing Index) involves a composite of one's satisfaction with seven personal life domains (standard of living, health, achievement in life, personal relationships, perceived safety, community connectedness, and future security), the national wellbeing measure (the National Wellbeing Index) involves a composite of one's satisfaction with three national life domains (economic situation, state of the environment, and social conditions). One's satisfaction with wealth/income distribution, health services, and family support as well as perceived social capital were measured as separate sub-domains. Later, the National Wellbeing Index was expanded to capture six domains (economic situation, state of the environment, social conditions, government, business, and national security) (see Tiliouine et al., 2006).

In contrast, Vemuri and Costanza (2006) proposed the model of a national wellbeing index (focusing on the set of four basic types of capital (Human, Built, Natural, and Social) and tested the predictive effect of this index on one's life satisfaction using

data collected from the World Values Surveys (WVS). In this study, various proxy indicators were used to measure each dimension of capital. Specifically, the Human and Built capital was captured using the UN's Human Development Index (which is comprised of a longevity index, an education index, and a standard of living index). Natural capital was captured through a measure of ecosystem services product per square kilometer. Social capital was captured using the Freedom House's press freedom ratings. Their study demonstrated that Human and Built capital and Natural capital accounted for a significant amount of variance in life satisfaction. Despite these indices for measuring national wellbeing, there has been no universal index that can be succinctly implemented and managed. This approach is consistent with global efforts to achieve sustainable growth through building strong institutions and healthy socioeconomic infrastructure with minimized environmental impacts (United Nations, 2015).

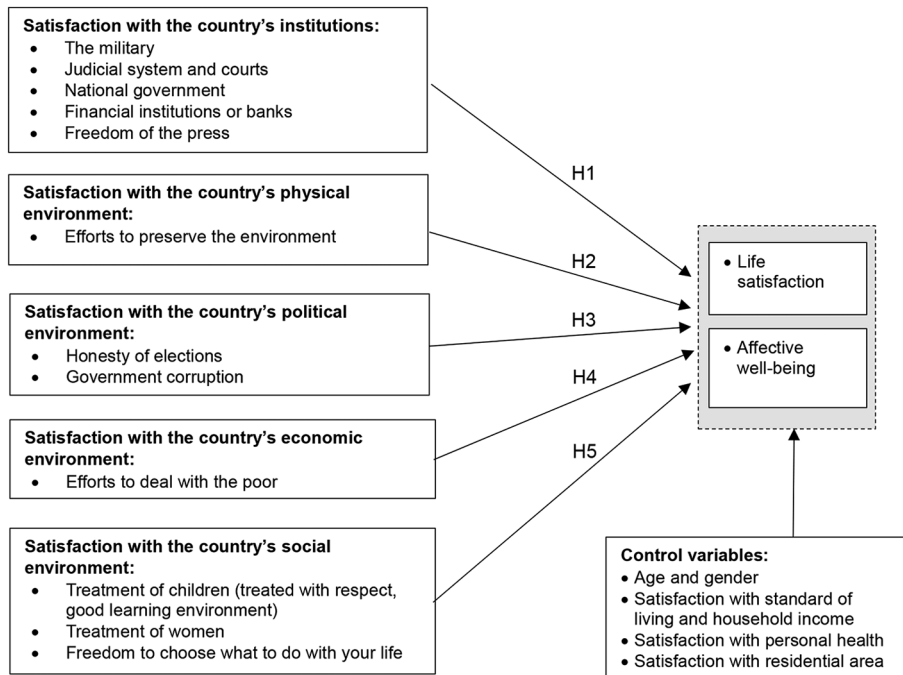
## Theoretical Model and Hypotheses

In order to build a model of national quality of life that is generalizable across all nations, the current study tests the model using a social survey, the Gallup World Poll (<https://www.gallup.com/analytics/318875/global-research.aspx>), with the exact set of subjective indicators in a global context. Our theoretical model is grounded in the stream of research that captures citizens' satisfaction with the country's various institutions and conditions. Specifically, with respect to the model we are about to describe below is based on the research that conceptualizes national wellbeing in terms of individuals' *satisfaction with the nation's various institutions and conditions (physical, political, economic, and social factors)*. We believe that a model focusing on this composite set of predictors of national wellbeing is likely to be most useful to public policymakers, globally.

The theoretical model is shown in Fig. 1. As shown in the figure, the model involves three major sets of constructs: (1) satisfaction with the country's institutions and conditions, (2) subjective wellbeing, and (3) control variables.

### Satisfaction with the Country's Institutions and Conditions

Based on item availability in the Gallup World Poll, this set involves constructs related to individuals' satisfaction with the country's institutions and conditions (physical, political, economic, and social environment). Satisfaction with the country's institutions is captured in terms of five dimensions, namely satisfaction with the military, judicial system and courts, national government, financial institutions or banks, and freedom of the press. Satisfaction with the country's physical environment is captured by the efforts to preserve the environment. Satisfaction with the country's political environment is captured in terms of two dimensions, namely honesty of elections and government corruption. Satisfaction with the country's economic environment is captured by efforts to deal with the poor. Satisfaction with the country's social environment is captured in terms of three dimensions, namely treat-



**Fig. 1** National-Level Institutions and Conditions Predict Subjective Wellbeing

ment of children (treated with respect, a good learning environment), the treatment of women, and the freedom to choose what to do with their own lives.

Please note that given the fact that we are using the Gallup World Poll survey, the inclusion of selected dimensions of the constructs involved in our model was restricted by data availability. We address this issue in Study Limitations in the [Discussion](#) section.

## Subjective Wellbeing

This construct involves two dimensions, namely life satisfaction and affective well-being. These two aspects of subjective well-being are measured in the Gallup World Poll across the countries, and they have been extensively used in previous research with the Gallup World Poll data (e.g., Helliwell et al., 2022; Joshanloo & Jovanović, 2019). They capture the two key aspects of subjective well-being, namely cognitive (life evaluation) and affective (affect balance) (Diener et al., 1999).

## Control Variables

The control variables involved a set of constructs that are held constant because of prior established relationships: age, gender, satisfaction with standard of living, household income, and satisfaction with personal health. These factors (age and gender being basic demographics, satisfaction with standard of living and house-

hold income being socioeconomic status, and satisfaction with personal health being health and functioning) have been demonstrated to be significant correlates of subjective wellbeing (e.g., Das et al., 2020). Despite the debate on the nature of the impact of age on one's subjective wellbeing, it is common to control for its impact on one's subjective wellbeing in survey research (e.g., Blanchflower, 2021). Studies have shown that household income has a positive impact on subjective wellbeing through satisfaction with the standard of living (e.g., Pleeging et al., 2021; Yu et al., 2020). Furthermore, satisfaction with personal health has long been understood as a prerequisite for subjective wellbeing (e.g., Mouratidis, 2021).

## Underlying Theory

What is the underlying theory that connects these constructs? We believe that the *bottom-up spillover theory of life satisfaction* is effective in explaining the theoretical connections (e.g., Andrews & Withey 1976; Campbell et al., 1976; Diener, 1984; Sirgy et al., 2000). The basic premise of the theory is the trickle of affect from concrete state of affairs to more abstract states. Specifically, individuals' satisfaction with the country's institutions and conditions impacts the more abstract evaluation of the nation at large. This abstract concept, in turn, influences the most abstract concepts of life satisfaction and affective wellbeing (i.e., bottom-up spillover).

In other words, individuals' overall satisfaction with the country they reside in is likely to be influenced by individuals' satisfaction with.

- the country's institutions (the military, judicial system and courts, national government, financial institutions and banks, and press),
- the country's physical environment (efforts to preserve the environment),
- the country's political environment (honesty of elections and government corruption),
- the country's economic environment (efforts to deal with the poor), and
- the country's social environment (treatment of children, treatment of women, and freedom to choose what to do with life).

Ultimately, individuals' satisfaction with the country's institutions and conditions together with the control variables (e.g., satisfaction with other relevant life domains (standard of living, household income, and personal health) as well as age and gender are expected to influence individuals' subjective wellbeing (i.e., life satisfaction and affective wellbeing). Succinctly, applying the bottom-up spillover theory we argue that individuals' satisfaction with a country can be decomposed into a variety of sub-domains, each of which contributes to their subjective wellbeing (i.e., life satisfaction and affective wellbeing).

## Hypotheses

Based on this theoretical model we articulate a set of hypotheses that will be subjected to an empirical test using data gathered by the Gallup World Poll. Satisfaction with the country's institutions as well as the physical (Binder & Blankenberg, 2016;

Kaida & Kaida, 2016), political (Helliwell et al., 2018), economic (Peters & Jetten, 2023; Wienk et al., 2022), and social environment (Helliwell et al., 2020) is known to contribute to one's subjective wellbeing.

**H1** Individuals' subjective wellbeing is a positive function of satisfaction with the country's institutions.

**H2** Individuals' subjective wellbeing is a positive function of satisfaction with the country's physical environment.

**H3** Individuals' subjective wellbeing is a positive function of satisfaction with the country's political environment.

**H4** Individuals' subjective wellbeing is a positive function of satisfaction with the country's economic environment.

**H5** Individuals' subjective wellbeing is a positive function of satisfaction with the country's social environment.

## Methods

### Participants

We used data from the 2019 Gallup World Poll, which included 162,740 respondents from 137 countries. The Gallup World Poll adheres to a robust methodology for collecting data from a diverse global population (Tortora et al., 2010). The interviews are conducted in person or by telephone. Probability-based sampling ensures national representation of residents aged 15 years and older. At least 1,000 individuals are interviewed each year in most countries, with larger samples in countries with larger populations. The countries included and their corresponding sample sizes are shown in Table 1. The median age of participants was 39 years, with a mean age of 41.803 and a standard deviation of 18.115. Females made up 53.5% of the sample.

### Measures

We selected the most relevant items from the 2019 Gallup World Poll (GWP) to operationalize our constructs of interest. The number of relevant items varied by construct, with some represented by one or two items and others measured by multiple indicators. Life satisfaction was assessed using the "ladder of life" question, which uses an 11-point Likert scale ranging from 0 (worst possible life) to 10 (best possible life). Except for the life satisfaction measure and the household income satisfaction item (used as a covariate), all other items in the study were binary (e.g., yes/no and satisfied/dissatisfied). Detailed information on the scales used, including their internal consistency, is presented in Table 2. Notably, some Cronbach's alpha coefficients

**Table 1** Countries and Sample sizes

Nation	<i>N</i>	Nation	<i>N</i>	Nation	<i>N</i>	Nation	<i>N</i>
Afghanistan	1,127	Eswatini	1,110	Luxembourg	1,025	Saudi Arabia	1,045
Albania	1,080	Ethiopia	2,222	Madagascar	1,000	Senegal	1,000
Algeria	1,100	Finland	1,025	Malawi	1,000	Serbia	1,080
Argentina	1,060	France	1,025	Malaysia	1,060	Sierra Leone	1,133
Armenia	1,080	Gabon	1,070	Maldives	1,000	Singapore	1,040
Australia	1,047	Gambia	1,120	Mali	1,130	Slovakia	1,080
Austria	1,025	Georgia	1,080	Malta	1,027	Slovenia	1,025
Azerbaijan	1,080	Germany	1,025	Mauritania	1,100	South Africa	1,060
Bahrain	1,060	Ghana	1,010	Mauritius	1,059	South Korea	1,016
Bangladesh	3,072	Greece	1,080	Mexico	1,001	Spain	1,025
Belarus	1,128	Guatemala	1,100	Moldova	1,080	Sri Lanka	1,083
Belgium	1,025	Guinea	1,140	Mongolia	1,070	Sweden	1,025
Benin	1,000	Honduras	1,000	Montenegro	1,080	Switzerland	1,025
Bosnia Herzegovina	1,080	Hong Kong	1,004	Morocco	1,015	Taiwan	1,030
Botswana	1,114	Hungary	1,080	Mozambique	1,000	Tajikistan	1,080
Brazil	3,001	Iceland	504	Myanmar	1,100	Tanzania	1,000
Bulgaria	1,080	Indonesia	2,192	Namibia	1,002	Thailand	2,000
Burkina Faso	1,000	Iran	1,058	Nepal	2,095	Togo	1,130
Cambodia	1,000	Iraq	2,097	Netherlands	1,029	Tunisia	1,000
Cameroon	1,000	Ireland	1,025	New Zealand	1,042	Turkey	2,059
Canada	1,031	Italy	1,025	Nicaragua	1,080	Turkmenistan	1,089
Chad	1,111	Ivory Coast	1,000	Niger	1,000	Uganda	1,000
China	3,709	Japan	1,023	Nigeria	3,000	Ukraine	1,080
Colombia	1,000	Jordan	1,001	North Macedonia	1,080	United Arab Emirates	1,413
Comoros	1,000	Kazakhstan	1,080	Northern Cyprus	1,050	United Kingdom	1,025
Congo Brazzaville	1,090	Kenya	1,001	Norway	1,025	United States	1,026
Costa Rica	1,000	Kosovo	1,088	Palestine	1,090	Uzbekistan	1,080
Croatia	1,080	Kuwait	2,023	Panama	1,080	Venezuela	1,080
Cyprus	1,043	ryrgyzstan	1,080	Paraguay	1,079	Vietnam	2,000
Denmark	1,025	Laos	1,070	Peru	1,000	Yemen	1,140
Dominican Republic	1,078	Latvia	1,080	Philippines	2,090	Zambia	1,000
Ecuador	1,000	Lesotho	1,000	Poland	1,080	Zimbabwe	1,082
Egypt	2070	Liberia	1,000	Portugal	1,026	<b>Total</b>	<b>162,740</b>
El Salvador	1,080	Libya	1,040	Romania	1,080		
Estonia	1,080	Lithuania	1,080	Rwanda	1,000		

fall below conventionally acceptable thresholds, primarily due to the concise nature of the scales and the use of binary items. However, in research at the global level, where longer scales are impossible, it may be more practical to adopt lower thresholds than those typically used in single-country research.

**Table 2** Variable characteristics

Variable	Content	N. of Items	Alpha
Life satisfaction	• Ladder of life question (0–10)	1	-
Affective well-being	• Smile • Enjoyment • Pain • Worry • Sadness • Stress • Anger	7	0.70
Satisfaction with country's institutions	• The military • Judicial system and courts • National government • Financial institutions or banks • Freedom of the press	5	0.70
Satisfaction with country's physical environment	• Efforts to preserve the environment	1	-
Satisfaction with country's political environment	• Honesty of elections • Government corruption	2	0.44
Satisfaction with country's economic environment	• Efforts to deal with the poor	1	-
Satisfaction with country's social environment	• Treatment of children (treated with respect, good learning environment) • Treatment of women • Freedom to choose what to do with your life	4	0.68

## Statistical Analysis

To account for the hierarchical nature of the data, this research employed multilevel modeling. Traditional regression methods, which assume independence of observations, are inappropriate for this type of data because individuals from the same country are likely to be influenced by shared contextual elements. Multilevel modeling addresses this issue by facilitating the examination of variable relationships while accounting for the nested structure of individual participants within their countries (Finch et al., 2019). The analysis was conducted using Bayesian estimation in Mplus with uninformative priors, as there was no strong prior knowledge about parameter values. This approach ensures that the results are primarily driven by the observed data, minimizing potential biases due to incorrect prior assumptions (Depaoli & van de Schoot, 2017). Our estimation procedure involved two Markov chain Monte Carlo (MCMC) simulations, each running for 10,000 iterations using the GIBBS (PX1) algorithm. The first 5,000 iterations were discarded as burn-in. We specified a random intercept model with no group-level covariates, centering mediators and predictors around their respective group means, except for binary variables (Enders & Tofghi,

2007). The Bayesian estimator uses all available data during estimation, similar to the full information maximum likelihood estimator, without excluding individuals with incomplete data, thereby maximizing data utilization.

To assess model convergence, we examined the potential scale reduction factor (PSRF) and visually inspected trace and autocorrelation plots (Brooks & Gelman, 1998). A PSRF value of 1,000 for all model parameters indicated satisfactory convergence. The analysis showed optimal chain mixing, as confirmed by the plots, indicating effective convergence and stability of the estimates. Model fit was assessed using the posterior predictive p-value, which was 0.508, indicating an acceptable fit. In Bayesian analysis, statistical significance is typically determined using credible intervals rather than p-values (Kruschke & Liddell, 2018). A credible interval represents the range of plausible values for an effect based on the posterior distribution. Effects are considered statistically significant if their credible intervals do not include zero.

## Results

A Bayesian multi-level model was tested to examine the relationships between our predictor variables as well as covariates (age, gender, satisfaction with standard of living, household income, personal health, and residential area satisfaction), and two outcome variables: personal life satisfaction and affective well-being. Table 3 shows the parameter estimates. Standardized coefficients are also provided for easy comparison of the effect size of each predictor. The model predicted about 14% of the variance in life ( $R^2=13.8\%$ ) and about 19% of the variance in affective well-being ( $R^2=19.3\%$ ). As is conventional in Bayesian analysis, we assessed the statistical significance of parameters using 95% credible intervals (CI) rather than relying on p-values. An effect is considered statistically significant at the 5% level when its 95% credible interval does not include zero.

Hypothesis 1 states that individuals' subjective wellbeing is a positive function of satisfaction with the country's institutions. Results show that satisfaction with the country's institutions positively affects life satisfaction (unstandardized coefficient=0.044, 95% Credible Interval (CI)=0.034–0.053; standardized coefficient=0.026) and affective well-being (unstandardized coefficient=0.028, CI=0.021–0.035; standardized coefficient=0.021), supporting H1 (see Table 3).

Hypotheses 2 to 5 state that individuals' subjective wellbeing is a positive function of satisfaction with the country's physical (H2), political (H3), economic (H4), and social (H5) environment. Results show that satisfaction with country's political (H3), economic (H4), and social (H5) were significant and positive predictors of subjective wellbeing. Specifically:

- H3: political environment → life satisfaction both life satisfaction (unstandardized coefficient=0.033, CI=0.012–0.054; standardized coefficient=0.009) and affective well-being (unstandardized coefficient=0.030, CI=0.015–0.045 standardized coefficient=0.010);
- H4: economic environment → life satisfaction both life satisfaction (unstandardized coefficient=0.117, CI=0.089–0.145; standardized coefficient=0.024) and

**Table 3** Parameter estimates

Predictor	Outcome	Unstandardized	95% Credible interval			Standardized
			Low	Up	Sig	
Country's institutions →	LS	0.044	0.034	0.053	*	0.026
Country physical environment →	LS	-0.035	-0.061	-0.008	*	-0.007
Country political environment →	LS	0.033	0.012	0.054	*	0.009
Country economic environment →	LS	0.117	0.089	0.145	*	0.024
Country social environment →	LS	0.039	0.028	0.050	*	0.019
Female →	LS	0.176	0.153	0.199	*	0.036
Age →	LS	-0.006	-0.007	-0.005	*	-0.039
Standard of living →	LS	1.054	1.026	1.081	*	0.207
Household income satisfaction →	LS	0.496	0.482	0.510	*	0.182
Personal health satisfaction →	LS	0.348	0.320	0.376	*	0.063
Residential area satisfaction →	LS	0.223	0.194	0.254	*	0.038
Country's institutions →	AWB	0.028	0.021	0.035	*	0.021
Country physical environment →	AWB	0.020	0.000	0.040		0.005
Country political environment →	AWB	0.030	0.015	0.045	*	0.010
Country economic environment →	AWB	0.042	0.021	0.063	*	0.011
Country social environment →	AWB	0.107	0.099	0.116	*	0.067
Female →	AWB	-0.152	-0.168	-0.135	*	-0.041
Age →	AWB	-0.005	-0.006	-0.005	*	-0.048
Standard of living →	AWB	0.567	0.546	0.587	*	0.145
Household income satisfaction →	AWB	0.358	0.348	0.368	*	0.171
Personal health satisfaction →	AWB	0.881	0.860	0.901	*	0.208
Residential area satisfaction →	AWB	0.437	0.414	0.459	*	0.098

Note LS=life satisfaction. AWB= affective well-being. Point estimate=median

An asterisk denotes a statistically significant effect, as indicated by a 95% credible interval that does not contain zero

affective well-being (unstandardized coefficient=0.042, CI=0.021–0.063; standardized coefficient=0.011); and.

- H5: social environment → life satisfaction both life satisfaction both life satisfaction (unstandardized coefficient=0.039, CI=0.028–0.050; standardized coefficient=0.019) and affective well-being (unstandardized coefficient=0.107, CI=0.099–0.116; standardized coefficient=0.067).

Unexpectedly, satisfaction with the physical environment (H2) failed to predict subjective well-being: physical environment → (life satisfaction: unstandardized coefficient = -0.035, CI = -0.061 - -0.008; standardized coefficient = -0.007; affective well-being: unstandardized coefficient=0.020, CI=0.020–0.000; standardized coefficient=0.005). The lack of support for H2 may be due to the lack of more items in the dataset that directly assess the concept of satisfaction with one's physical environment. Furthermore, this may be due to the potential confounding effects of other predictors within the model. To investigate this possibility, we conducted a supplementary analysis in which satisfaction with the physical environment was isolated as the sole predictor. This analysis revealed that satisfaction with the physical environment significantly predicted both life satisfaction (unstandardized coefficient=0.348,

CI=0.323–0.373; standardized coefficient=0.072) and affective well-being (unstandardized coefficient=0.348, CI=0.329–0.368; standardized coefficient=0.094). These results indicate that the relationship between physical environment satisfaction and measures of well-being is positive and significant. However, this relationship is obscured in the full model by the inclusion of additional variables.

## Discussion

As previously stated, much of the research on subjective indicators of national well-being is based on surveys of selected countries. We argued that the findings of past studies are limited to the selected countries. In other words, study findings from past research are not generalizable across all countries in a global context. As such, we sought to build a model that applies to all countries across the globe and test this model using a social survey with the exact set of subjective indicators across a multitude of countries in a global context, namely the Gallup World Survey ( $n=137$  countries).

We also argued that our theoretical model is grounded in the stream of research involving the major factors influencing citizens' satisfaction with the country's institutions and its various environments. Specifically, we made the case that our model is based on research that conceptualized national wellbeing in terms of citizens' satisfaction with the country's institutions and its various environments (physical, political, economic, and social). As such, our concept of national wellbeing is grounded in the research that captures the various dimensions that make up this formative construct: citizens' satisfaction with the country's institutions, its physical environment, its political environment, its economic environment, and its social environment.

As such, the theoretical model involved five hypotheses. Hypothesis 1 states that citizens' subjective wellbeing (life satisfaction and affective wellbeing) is a positive function of their satisfaction with the country's institutions. Hypotheses 2–5 focused on the effects of citizens' satisfaction with the country's various environments (H2: physical environment; H3: political environment; H4: economic environment; and H5: social environment). We explained all the hypothesized effects using bottom-up spillover theory, a theory well-established in quality-of-life studies. Succinctly put, citizens' satisfaction related to concrete life events (i.e., satisfaction with specific country conditions and services) influences citizens' subjective wellbeing (i.e., life satisfaction and affective wellbeing). In other words, affect invested in concrete events tends to trickle up to influence affect in relation to overall life, the most abstract judgments about life at large.

We tested these hypotheses using survey data collected in 2019 by the Gallup Poll organization. The sample involved 162,740 respondents from 137 countries. More than 1,000 individuals were randomly selected in each country ensuring that the study findings would be generalizable to the selected countries. The results were largely supportive of our hypotheses. Specifically, the results supported the hypothesis that citizens' subjective wellbeing (both life satisfaction and affective wellbeing) is a positive function of citizens' satisfaction with the country's institutions (Hypothesis 1).

The results were also supportive of the hypotheses related to the country's various environments (H3: political environment; H4: economic environment; and H5: social environment) That is, citizens' satisfaction with the country's institutions and various environments (concrete life events) influence citizens' subjective wellbeing (most abstract judgments about citizens' happiness at large). To reiterate, these hypothesized effects are theoretically grounded in the bottom-up theory of life satisfaction.

## Policy Implications

Based on the study findings we conclude that we were successful in developing and testing a model of subjective indicators of national wellbeing that applies to all countries across the globe. We also believe that our model clearly articulates important dimensions of national wellbeing that are likely to be most useful to government policymakers, globally. Specifically, conducting a survey in any country guided by our theoretical model should allow public policy officials to develop policies directly related to the predictors of citizens' subjective wellbeing, predictors related to the country's various institutions and environments:

- policies related to the country's institutions (i.e., the military, judicial system and courts, national government, financial institutions and banks, and freedom of the press),
- policies related to the country's physical environment (i.e., efforts to preserve the environment),
- policies related to the country's political environment (i.e., honesty of elections, government corruption),
- policies related to the country's economic environment (i.e., efforts to deal with the poor),
- policies related to the city's social environment (i.e., treatment of children with respect and providing children with a good learning environment, treatment of women to achieve gender equality, freedom to choose what to do with one's life rather than dictated by the government).

Our model allows policymakers of any country to apply these indicators to measure strengths and weaknesses; thus, developing policies to reinforce strengths and to remedy weaknesses. However, it should be noted that every country has its own unique challenges (both strengths and weaknesses) that are not likely to be captured by the "global model." Given that our model is a global model, it should be complemented with a "local model." The local model should capture citizens' unique set of issues, unique to the country itself. For example, suppose that a country has a particular problem with a culture that condones sexual harassment. Citizens complain that most people in the country expect women to be "virtuous" in the way they dress and interact with men. As such, the culture condones men acting sexually aggressive in situations in which women violate social norms. Country leaders and policymakers wish to gauge the extent to which citizens feel dissatisfied with cultural norms regarding sexual harassment. This issue is an example of a dimension of the social environment not captured by the global indicators of our model. Or how about racial

discrimination and ethnic strife in a country? Again, such an issue (another dimension of the social environment) is not captured in our global model. As such, a local model has to be developed to complement the global model producing a comprehensive set of indicators capturing citizens' satisfaction with all the important institutions and conditions of the country at large.

### Study Limitations and Future Research

One can argue that the Gallup Poll missed important indicators that should have been incorporated in the “global model,” indicators such as citizens' satisfaction with the country's healthcare system, education system, military system, economic system, environmental regulation, judicial system, and welfare system. Shouldn't these indicators be included in the set of subjective indicators related to the country? As such, the global model should be revisited to ensure more comprehensive global dimensions of the country's quality of life. See Sirgy (2018) for a discussion on what constitutes a “comprehensive” set of city quality-of-life indicators. This discussion is relevant to national wellbeing too. One way to develop a set “comprehensive” set of subjective indicators of city quality of life entails a better understanding of the theoretical concept guiding the formulation of the indicators. The global model we developed in this paper is guided implicitly by the concept of *personal utility* (Sirgy, 2022, pp. 16–19). The basic premise here is that a country rated high on well-being is a country in which its citizens evaluate their lives positively (i.e., satisfaction with overall life; specific life domains such as family life, work life, leisure life, neighborhood, housing, etc.; and conditions and services related to the country at large). Satisfaction in each life domain is influenced by satisfaction with national-level institutions and conditions. As such, future research is encouraged to connect citizens' satisfaction with national-level institutions and environments to citizens' domain satisfaction, which in turn influences citizens' subjective wellbeing. As such, the global model can be “fine-tuned” to gain a better understanding of the underlying theoretical concept by including salient dimensions capturing the entire domain of the concept of personal utility.

Our study has methodological limitations too that warrant further research. First, most of the constructs from the Gallup survey were captured using a single item with binary scales. One can argue that such measures are not optimal in the construct-validity sense (e.g., Diamantopoulos et al., 2012). Furthermore, the Gallup Poll does not report on the theoretical rationale for selecting survey items to capture the entire domain of the selected constructs. This is a methodological weakness related to the use of the Gallup Poll data.

Contrary to our model, one could also argue that one's subjective wellbeing, life satisfaction, and affective wellbeing, could affect their evaluations of country conditions and services based on the top-down theory of wellbeing (Brief et al., 1993; Feist et al., 1995; Headey et al., 1991; Nakazato et al., 2011). In other words, one's subjective wellbeing can influence one's evaluations of life circumstances. Despite possible correlations, however, the purpose of this study was to explore how to increase the subjective wellbeing of national populations by enhancing concrete country condi-

tions and services based on the bottom-up spillover perspective. Future studies could compare the relative predictive power of the two perspectives.

## Concluding Remarks

The current study significantly advances the research on subjective indicators of national wellbeing by providing a comprehensive, globally applicable model. Utilizing data from 137 countries, we have demonstrated the validity of our model in capturing the diverse factors that influence citizens' perceptions of the country's quality of life. Our findings not only support the hypothesis that citizens' satisfaction with various country institutions (military, judicial system and courts, national government, financial institutions, freedom of the press) and environments (physical environment: efforts to preserve the environment; political environment: honesty of elections and government corruption; economic environment: efforts to deal with the poor; social environment: treatment of children and women, and freedom to choose what to do with one's life) directly influence citizens' overall subjective well-being. This underscores the importance of considering both global and local indicators when assessing national wellbeing. Government officials and policymakers can use our results to identify and address specific areas needing improvement while acknowledging the unique challenges and strengths of their countries. Integrating these insights can lead to more targeted and effective national policies, ultimately enhancing national wellbeing.

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**Data Availability** The data from the Gallup World Poll used in this study can be accessed by the public upon purchase from Gallup at <https://www.gallup.com/analytics/213617/gallup-analytics.aspx>.

## Declarations

**Conflicts of interest** The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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