



# Construction and Validation of Social Citizenship Index

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Received 2021 March 30; Revised 2021 October 03; Accepted 2021 October 10.

## Abstract

**Background:** Social citizenship means creating a situation in which everyone can develop their full potential.

**Objectives:** This study aimed to determine the social citizenship index with its various dimensions in selected countries.

**Methods:** This study used a mixed-methods approach consisting of two phases. In the first phase, social citizenship items were extracted based on a systematic review of previous studies and interviews with experts using direct content analysis. In the second phase, the standardized index was assessed by performing the validity and reliability tests. To combine the dimensions, their values were standardized using the Z score. To analyze the data, factor analysis and normality tests were used.

**Results:** The social citizenship index was categorized into four main dimensions, including health and education, livelihood, economic-political prosperity, and open society. In this study, 125 countries were categorized based on the Social Citizenship Index. The selected countries were classified into three categories based on the opinions of the research group and the cutting point of statistical quartiles: high (32 countries), medium (62 countries), and low (31 countries).

**Conclusions:** It can be concluded that the social citizenship index with four main dimensions and 26 variables is a new tool that allows countries to be compared in the areas of providing welfare services to their citizens.

**Keywords:** Social Citizenship, Social Rights, Citizenship, Indexing

## 1. Background

The concept of social citizenship is of great importance in the course of social sciences. It is attributed to the social nature of human beings, who throughout history have always needed to satisfy their minimal needs for living. In fact, it can be introduced as the most important reason for human beings to gather around each other and form a society. Some of the common needs are security, survival, and continuity of life against the violence of nature (famine, flood, fire, and disease), as well as physiological and social needs (1). Therefore, it can be said that the main goal of many economic and social policies is to improve the quality of life of citizens in every community (2).

Experts such as Marshall introduced social citizenship as the provision of economic security and prosperity, the right to participate in social processes, and the enjoyment of civilized living standards in a community (3). In addition, meeting the diverse needs of citizens and social groups is not possible without their participation in determining and implementing supportive policies. Moreover,

the presence of citizens in support mechanisms to meet their needs is, in fact, the main approach of social citizenship (4). In general, social citizenship is not specifically the goal of development, but it is development itself, that is, a community is considered to be developed only when it provides the minimum or proportionate standards of living in terms of housing, education, nutrition, employment, health, and social security for every citizen (1, 5).

This study is an attempt that was made to measure social citizenship as an emerging concept and approach in welfare planning and as a criterion for countries to achieve comprehensive development. It is an indicator that should be considered as a serious scale in countries (6). Therefore, in this research, an attempt was made to construct a social citizenship index to measure social citizenship and its components and dimensions in different countries (7).

Social citizenship covers a wide range of different dimensions beyond rights and duties, and there are several theories in this field that can be classified into four groups:

- The first group: Experts such as Doyal and Gough (1991) believe that to enjoy social citizenship, it is not nec-

essary to meet conditions such as having a job and responsibility at all times. This right is based on social interactions and is a responsibility of every community that must be fulfilled for every individual. Thus, the community must provide the resources for human development (8). In the 20th century, there were some problems related to inequality and social justice that are being addressed or reduced through the institutionalization of social welfare systems. At the end of the 20th century, no reduction was observed in social and economic inequalities, and social welfare mechanisms were criticized seriously (9). In the social citizenship approach, in addition to the social rights of citizens, social and political participation is also emphasized (10).

For the first time, Thomas Marshall formally addressed the relationship between social citizenship and social inequality in industrial communities (11). He points out that the welfare state, through the redistribution of material resources, is an integral part and prerequisite of social rights. Social citizenship is the guarantor and custodian of civil, political, and social rights, which plays an effective role in reducing the class inequality created by the market. In general, it can be said that social citizenship plays the main role in de-commodification and social inclusion in every community. It allows everyone, regardless of market value, to have access to social security (12). It can be said that social citizenship is the last bastion of countries to get out of the economic and livelihood crisis and reduce social inequalities.

- The second group: From the perspective of egalitarian liberalism, the development of individual freedom and individual rights is the core of creating social policies through the realization of social citizenship. It aims to reach free and equal citizens (13). The liberalist approach seeks equality by providing minimum welfare services and seeks to reduce costs with the most welfare coverage; that is, low welfare services with higher public coverage (14). People with such a perspective also argue that social citizenship resembles social rights that are legally established by modern welfare states (15). In general, social citizenship, in their view, is very closely related to the modern welfare state.

- The third group: In the Anglo-Saxon liberal tradition, property rights are essentially the basis of other rights and are used to translate other types of property claims. They are conceptualized in the form and pattern of property rights in the context of equal transactions. In this context, social citizenship cannot be used as a real right. From this perspective, all non-private and non-property relationships should be in the form of charity and philanthropy (16). Since the recipients of welfare benefits have nothing to pay for what they receive, it is a violation of market prin-

ciples that is inappropriate and inconsistent with their principles. They believe that to purposefully enjoy the advantages of social citizenship (such as job training for unemployed people), it is necessary to adhere to market-based principles and perform individual duties (17).

- The fourth group: This group considers social citizenship as a consequence of the free market or a method to repair the negative consequences of free-market such as occupational diseases, disability, aging, unemployment, and lack of income (18). It seems that in the 21st century, leading governments in the field of welfare services, to varying degrees and forms, have sought to reform and improve their social policies. In this regard, they seek to reconfigure the basic structure of social citizenship (19).

From the perspective of the new communitarians, duties must precede social rights because social rights are acquired after carrying out duties by citizens. In other words, "duties before rights" are a precondition for securing the virtues and privileges of social citizenship. They have a strong focus on active citizenship and use political tools to strengthen the duties and responsibilities of active citizens (20).

## 2. Objectives

The present study aimed to construct and validate the social citizenship index and rank countries based on the social citizenship index. The outline of the study is presented in Table 1.

## 3. Methods

In this study, a mixed-methods approach was used (with quantitative and qualitative data), particularly the IDCV meta-framework, to develop and validate the social citizenship index. The IDCV method included 10 sequential phases that started with the conceptualization of social citizenship and its dimensions using a directed content analysis approach). Then, the revised index was applied by five experts outside the interviewee and research teams to measure the construct validity and convergent validity of the index. Finally, the dimensions and correlates of social citizenship among countries were explored. In this process, directed content analysis and manual coding were used for qualitative data analysis, while for quantitative data analysis, statistical techniques such as explanatory data analysis, canonical correlation, and normal distribution were applied in SPSS software. Internal consistency was assessed by calculating Cronbach's alpha to examine internal reliability. The test-retest method was used for external validity.

To develop and apply this index, the following steps were performed:

**Table 1.** Study Outline

Systematic Review	Qualitative (Semi-structured Interviews)	Quantitative	Validation	Ranking of Countries
Data search strategy	16 interviews with experts	(125 countries) data collection	(125) countries	All countries with accessible information (125)
46 articles related to social citizenship	Limits: Having a book, article, or research in the field of social citizenship	Limited: international sites, reliability, availability of data	EFA (26 variables)	Social citizenship index
From 2010	45 minute interviews on average		Z score	Main dimensions
	Manual coding		Elongation and skewness	The categories were extracted based on the opinion of the research group and the cutting point of statistical quartiles
	Extraction of the main and sub-components		Cronbach's Alpha	
	Selection of variables (68) and the main dimensions of social citizenship index		Correlation; Revised by 5 experts outside the interviewee and research team	

1. Search strategy: The term "social citizenship" was searched in the ProQuest, EBSCO, Jstor, Pubmed, and Scopus databases. In addition to the five major databases, we searched other search engines, such as google scholar, and read as many articles as possible from 2010 according to similar criteria. Search paths were used in each database, and the phrase "social citizenship" was used in the search title; if possible, "or" was used to search for two words simultaneously for example, in the Ebsco database, "social or citizenship" was searched. The criteria for including the articles in the present study were as follows: The word "social citizenship" should be included in the title, the words "model, definition, theory, structure, dimension, or perception" should be included in the abstract; the articles should be in English and published in the full text, and other terms such as citizenship, political citizenship, or economic citizenship should not be included in the study to avoid overlapping concepts.

2. Development of a theoretical framework: It was carried out through reviewing scientific resources related to social citizenship and conducting semi-structured interviews as mentioned earlier in the theoretical framework.

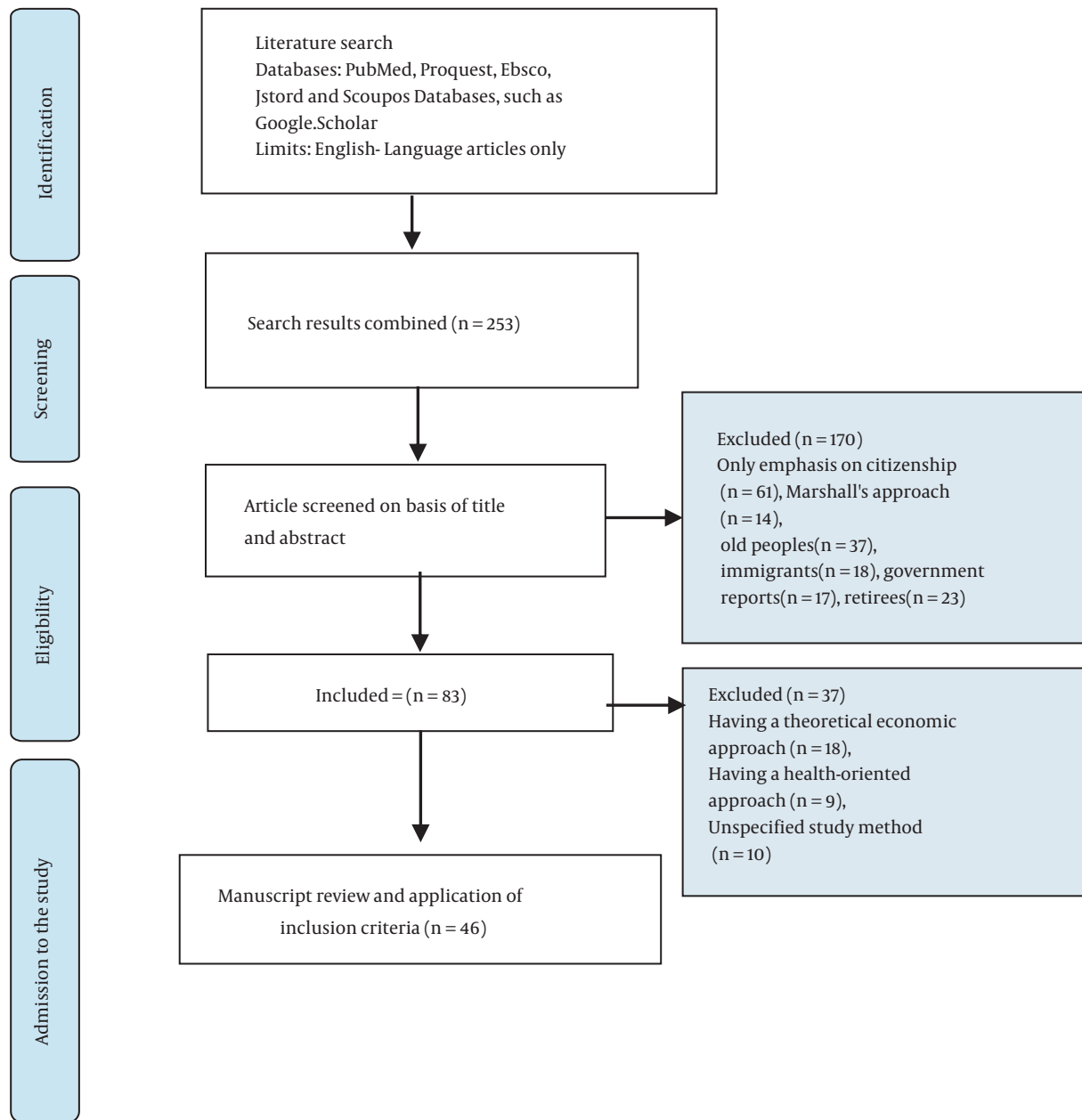
3. Selection of variables: At first, to analyze social citizenship and its various dimensions, we systematically reviewed the studies conducted in the field of social citizenship, and social citizenship indicators were extracted from 46 articles. [Figure 1](#) shows how to select the articles.

4. Extracting dimensions of social citizenship: The dimensions of social citizenship were extracted based on the results of 16 interviews with experts in the field of social citizenship. Each interview lasted an average of 45 min-

utes. After the interviews, the texts were sorted and coded, and the main and secondary components of social citizenship were categorized. After the coding, the main components and sub-components were extracted. After analyzing the results obtained from reviewing resources and interviewing experts, 26 indicators in four dimensions were chosen as the selected indicators, as follows: health and education component (16 indicators). This dimension is very important so that all the interviewees emphasized its importance, ". . . Health and education are the main basic needs of every human being without which life is not possible . . ." (interview 7); Open community component (six indicators), ". . . Individual, political, and press freedom improves the quality of life and enhances societies. . ." (interview 2); political-economic prosperity component (two indicators), ". . . The rate of economic growth in any country is a sign of economic development and the purchasing power of citizens, of course, along with the distributive justice of wealth. . ." (interview 5); and livelihood component (two indicators), ". . . Supporting people in difficult situations helps reduce life crises and leads to a normal life. . ." (interview 15).

5. Conducting exploratory and confirmatory factor analysis: The research team assessed and analyzed the results obtained from exploratory and confirmatory factor analysis and made final decisions on variables based on internal homogeneity and internal correlation in each factor.

6. Standardization based on Z score: Due to the fact that different variables usually have various units of measurements, before the aggregation process, they must be



**Figure 1.** PRISMA flow diagram of literature search and selection process

come specified and be assessed using an identical unit. In this study, among the various normalization methods, we selected the standardization method using the Z score.

7. Performing normal distribution tests (elongation and skewness), correlation tests of social citizenship index dimensions, and reliability by Cronbach's alpha.

8. Aggregation: Since the standardization of expressions had been performed in the previous stages, in the

present stage, the method of linear aggregation was used.

9. Performing correlation tests between social citizenship components and other related statistical tests.

10. Introducing a new index and ranking 125 selected countries (125 countries were selected because their data were accessible).

## 4. Results

In the present study, out of 47 variables selected in the systematic review of scientific resources and interviews, 26 variables were selected based on the results of principal component analysis. It should be noted that when selecting variables with significant factor loads, the signs of some of them (correlation) are probably negative. Therefore, the negative signs of these variables indicate the opposite direction of the relationship between the variables. Thus, for the variables including death due to household gas poisoning, infant mortality, maternal mortality, death due to infectious diseases, premature marriage, mortality due to road accidents, inequality in education, lack of press freedom, discrimination and violence against minorities, lack of adequate income, and lack of legal protection for employees, we used the reverse technique. Therefore, they were re-encoded, and new inverse variables were created.

As observed in the scree plot (Figure 2), the evaluated indicators had the highest variability on four factors, and the decreasing trend at this point became almost smooth.

First stage. Evaluating the possibility of factor analysis on factors: Based on the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy, which was equal to 0.91, research data could be reduced to a number of underlying and fundamental factors. In addition, based on the results of Bartlett's test of sphericity (4441, 856), which was significant at the error level of less than 0.00, the correlation matrix between the variables was the matrix of similarity. On the one hand, there was a high correlation between the variables within each factor, and on the other hand, there was not much correlation between the variables of one factor and the variables of another factor.

Second stage. Assessing the contribution of each factor to explaining the total distribution of all variables: As the next issue, it was necessary to determine the percentage of the distribution of a set of variables explained by each factor. This problem can be understood in Table 2, which shows the total distribution. This table presents the eigenvalues and the percentage of dispersion, and the percentage of cumulative dispersion obtained from the data set for each factor.

According to Table 2, the four extracted factors (81.430%) explained the percentage of the total dispersion of the indicators. The first factor alone explained 55.1% of the total dispersion. The second factor explained 12.5%, the third factor explained 8.6%, and the fourth factor explained 5.1% of the total dispersion.

Third stage. Understanding the matrix of correlation between variables and factors and classifying variables in each factor: To classify variables among factors based on their factor loads, we used the results of a rotated factor

matrix (Table 3). This table shows the correlation matrix between variables and factors after rotation, in which the correlation value fluctuates between -1 and +1 and is categorized based on the largest factor load of the variables.

At this stage, the titles were selected for each of the factors, as follows: (1) the first factor, health and education; (2) the second factor, open society; (3) the third factor, political-economic prosperity; and the fourth factor: livelihood. There were 16 indicators in the health and education component, six indicators in the open society component, two indicators in the political-economic prosperity component, and two indicators in the livelihood component.

### 4.1. Test of Normality of Social Citizenship Index

Using graphic indicators (elongation and skewness), the normality of the distribution of education and health, open society, political-economic prosperity, and livelihood components and the social citizenship index in the society was studied.

### 4.2. Calculation of Elongation and Skewness Indices

Values close to zero for these two indices indicates the normality of the distribution of a variable, and usually, values between +1 and -1 indicate acceptable elongation and skewness. In other words, if the two calculated indices have values between these two cutting points, the distribution of the studied variable is normal.

As shown in Figure 3, the score of the health and education component in the studied countries was almost normal. Based on the elongation and skewness indices, the distribution of data tended to the left. Based on the elongation and skewness indices of data distribution, the open society component also had an almost normal distribution and was inclined to the right. As observed, the score of the livelihood component in the studied countries was almost normal. However, based on the elongation and skewness index, the data distribution tended to the left. The score of the political-economic prosperity component was also almost normal and was slightly inclined to the right based on the skewness index and slightly inclined to the left based on the elongation score. Social citizenship scores were almost normal in the studied countries. However, based on the elongation and skewness indices, the data distribution tended to the left.

Cronbach's alpha is used to examine the internal correlation, which is one of the important indicators for measuring reliability. A higher value (close to 1) indicates greater internal consistency and coherence. For scales that had subscales, Cronbach's alpha was calculated separately for each of them. Cronbach's alpha value for all of the social citizenship indicators was 0.91. As shown in Table 4,

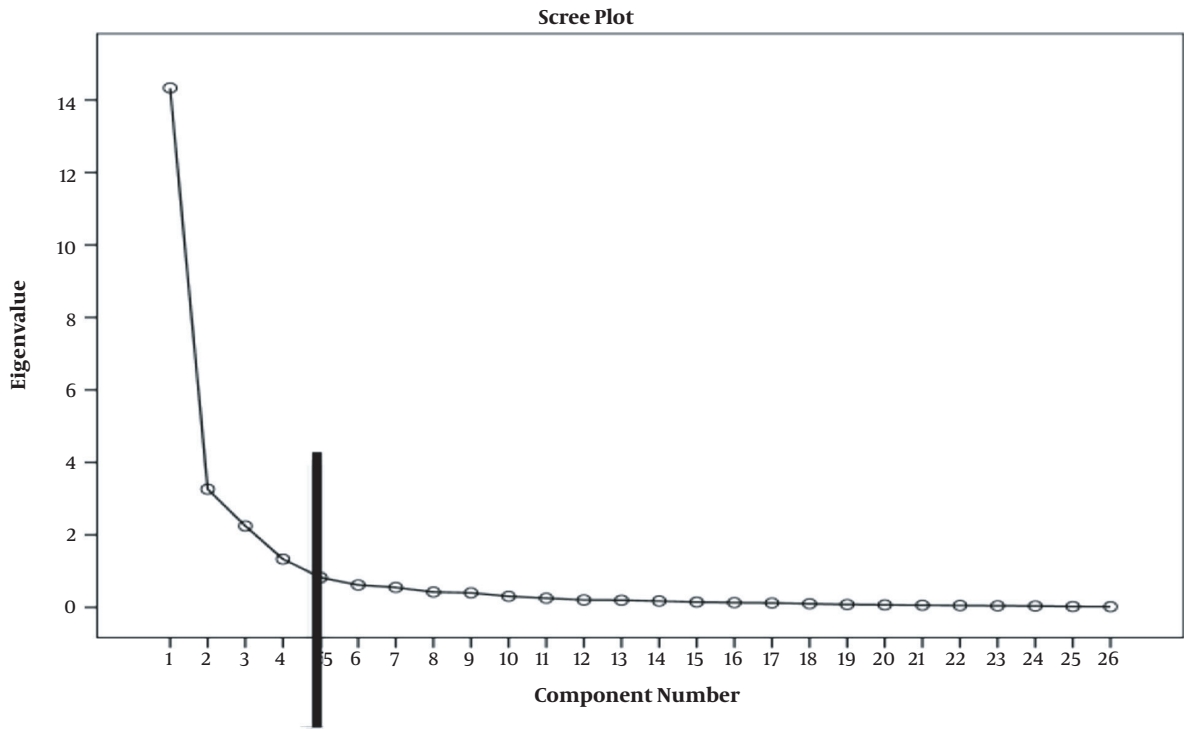


Figure 2. Scree plot of social citizenship index factor analysis

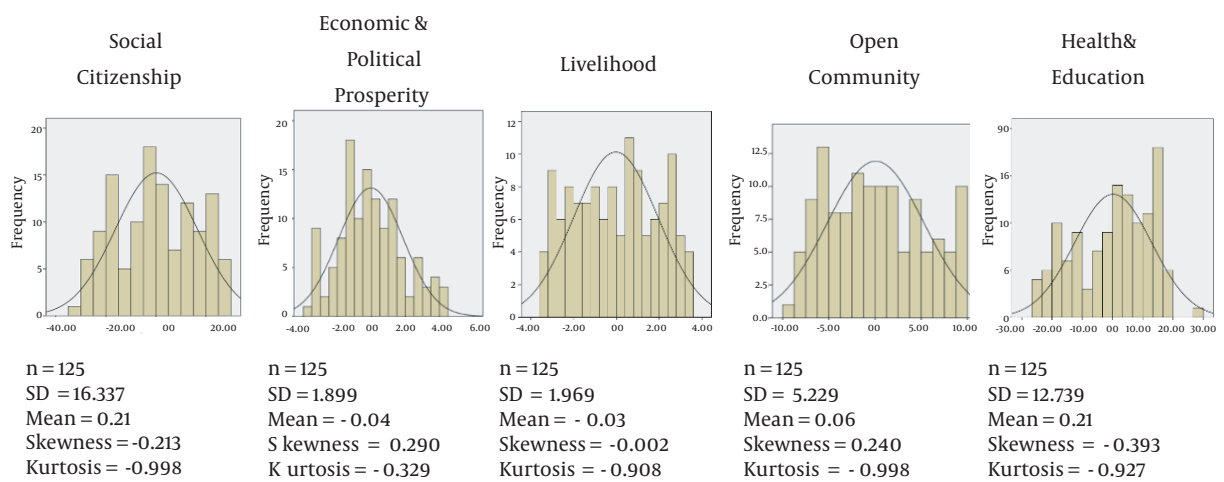


Figure 3. Normal distribution of components and Social Citizenship Index

**Table 2.** Total Variance Explained by Components of Social Citizenship<sup>a</sup>

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings <sup>b</sup>
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	14.333	55.127	55.127	14.333	55.127	55.127	13.618
2	3.261	12.542	67.669	3.261	12.542	67.669	7.573
3	2.246	8.638	76.306	2.246	8.638	76.306	2.361
4	1.332	5.123	81.430	1.332	5.123	81.430	3.099
5	0.823	3.165	84.595				
6	0.618	2.377	86.972				
7	0.550	2.115	89.087				
8	0.423	1.625	90.712				
9	0.400	1.537	92.249				
10	0.304	1.169	93.419				
11	0.253	0.974	94.393				
12	0.206	0.792	95.184				
13	0.197	0.759	95.943				
14	0.173	0.667	96.610				
15	0.147	0.564	97.175				
16	0.132	0.508	97.682				
17	0.121	0.466	98.148				
18	0.100	0.386	98.534				
19	0.080	0.306	98.840				
20	0.068	0.260	99.101				
21	0.060	0.230	99.330				
22	0.051	0.195	99.525				
23	0.043	0.165	99.691				
24	0.038	0.145	99.835				
25	0.024	0.091	99.926				
26	0.019	0.074	100.000				

<sup>a</sup> Extraction Method: Principal Component Analysis.

<sup>b</sup> When components are correlated, the sums of squared loadings cannot be added to obtain a total variance.

Cronbach's alpha value for all the dimensions of social citizenship was above 0.70.

Table 5 presents the relationship and correlation between the components. As presented, a significant relationship was observed between health & education and open society, livelihood and political-economic prosperity, open society and political-economic prosperity, and political-economic prosperity and livelihood.

Finally, the social citizenship index with dimensions and indicators is seen in Figure 4 after factor analysis and normality tests.

### 4.3. The Status of Social Citizenship and Its Dimensions in the Studied Countries

In this part of the study, we assessed the status of the studied countries in terms of social citizenship dimensions and related indicators.

As shown in Table 6, the position of the countries was determined according to the final index of social citizenship and its main dimensions, including health and education, livelihood, economic-political prosperity, and open society. Finally, the results showed that in the social citizenship index, 32 countries were in the upper position, 62 countries were in the middle position, and 31 countries



Table 3. Structure Matrix

Indicator	Factor			
	1	2	3	4
Healthy life expectancy	0.946	0.493	0.092	-0.310
Access to improved sanitation facilities	0.945	0.297	0.080	-0.239
Household air pollution attributable deaths	-0.942	-0.332	-0.054	0.310
Child mortality rate	-0.925	-0.367	-0.144	0.336
Women's average years in school	0.910	0.474	0.147	-0.195
Secondary school enrollment	0.905	0.502	0.134	-0.220
Maternal mortality rate	-0.902	-0.259	-0.056	0.357
Internet users	0.895	0.569	0.152	-0.139
Access to piped water	0.894	0.455	0.141	-0.206
Deaths from infectious diseases	-0.861	-0.191	-0.008	0.339
Adult literacy rate	0.853	0.196	0.122	-0.243
Early marriage	-0.822	-0.376	-0.154	0.189
Life expectancy at 60	0.815	0.626	0.110	-0.242
Traffic deaths	-0.787	-0.576	-0.119	0.140
Inequality in the attainment of education	-0.745	-0.405	-0.165	0.083
Community safety net	0.736	0.445	0.055	-0.260
Political rights	0.448	0.921	0.178	-0.135
Freedom of expression	0.357	0.912	0.177	-0.112
Press Freedom Index	-0.254	-0.901	-0.188	0.020
Corruption	0.629	0.841	0.168	-0.087
Private property rights	0.599	0.837	0.171	-0.122
Discrimination and violence against minorities	-0.380	-0.803	-0.121	0.062
GDP	0.092	0.149	0.962	-0.211
Trust in government	0.139	0.153	0.955	-0.261
Adequate income	0.305	0.125	0.263	-0.984
Social protection expenditure, excluding health	0.295	0.123	0.258	-0.980
Eigenvalue	14.33	3.26	2.24	1.33
% of Variance	55.12	12.54	8.63	5.12
	81.430			
Significance	KMO = 0.91; Bartlett's test Sig = 0.000; $\alpha = 0.93$			

were in the lower position.

## 5. Discussion

Social citizenship is a kind of realization of social rights, and participation means the expansion and increase of social rights in society. That is, with the participation of community members in the political and legal spheres, the scope of social rights increases, and social awareness is achieved. In the meantime, governments

should promote the quality of life and social welfare by providing health services that are the basis of the fundamental rights (21), as well as other social services such as education and social support to their citizens.

The four main components of social citizenship included "health and education", "open society", "livelihood", and "political-economic prosperity". Based on the scores obtained in the four components, the selected countries were grouped in the upper, middle, and lower groups, so that 32 countries were at the highest level, 62 coun-



**Table 4.** Reliability Statistics (n = 125,  $\alpha = 0.91$ )

Items	Cronbach's Alpha	Std. Deviation	Cronbach's Alpha if Item Deleted
<b>Health and Education (n = 125)</b>	0.93	307.9676	
Healthy life expectancy			0.932
Access to improved sanitation facilities			0.943
Household air pollution attributable deaths			0.941
Child mortality rate			0.933
Women's average years in school			0.933
Secondary school enrollment			0.942
Maternal mortality rate			0.915
Internet users			0.927
Access to piped water			0.913
Deaths from infectious diseases			0.932
Adult literacy rate			0.922
Early marriage			0.939
Life expectancy at 60			0.944
Traffic deaths			0.921
Inequality in the attainment of education			0.938
Community safety net			0.954
<b>Open Community (n = 125)</b>	0.87	100.3497	
Political rights			0.851
Freedom of expression			0.824
Press Freedom Index			0.886
Corruption			0.847
Private property rights			0.825
Discrimination and violence against minorities			0.865
<b>Economic and Political Prosperity (n = 125)</b>	0.85	23.8471	
GDP			0.847
Trust in government			0.867
<b>Livelihood (n = 125)</b>	0.91	71.0634	
Adequate income			0.913
Social protection expenditure, excluding health			0.912

tries were at the medium level, and 31 countries were at the lowest level. The results showed that Finland, Sweden, Switzerland, the Netherlands, Norway, Australia, Germany, the United Kingdom, Denmark, and Iceland were the top 10 countries, in sequence, and Zimbabwe, Afghanistan, Mozambique, Angola, Sierra Leone, Niger, Ethiopia, Mali, Guinea, and Chad ranked last among the 125 countries studied. Meanwhile, Iran, along with Egypt, China, Algeria, and Nicaragua, ranked 85th in the social citizenship index. Concerning the main components, it ranked 75th in health and education, 123rd in open society, 50th in liveli-

hood, and 41st in economic-political prosperity. It can be concluded that the success of the first-level countries in the social citizenship index can be a model in providing welfare services to citizens in other countries.

Significant progress has been made in measuring and comparing the development of different societies at the international level by various indicators. Meanwhile, the study of different countries based on different social, economic, political factors with scientific indicators helps planners and policymakers to create promotional programs (22). One of the important international indicators

**Table 5.** Correlation Between the Components

Correlation	Health and Education	Open Society	Political-Economic Prosperity	Livelihood	Social Citizenship
<b>Health and education</b>	1	0.597 <sup>a</sup>	0.203 <sup>b</sup>	-0.255 <sup>a</sup>	0.958 <sup>a</sup>
<b>Open society</b>		1	0.213 <sup>b</sup>	-0.153	0.767 <sup>a</sup>
<b>Political-economic prosperity</b>			1	-0.368 <sup>a</sup>	0.190 <sup>b</sup>
<b>Livelihood</b>				1	-0.165
<b>Social citizenship</b>					1

<sup>a</sup> Correlation is significant at the 0.01 level.

<sup>b</sup> Correlation is significant at the 0.05 level.

<sup>a</sup> Sources: WHO, ILO, OECD, World Bank, World Happiness Report, Social Progress Index, Institute for Economics and Peace Global Peace Index, FAO, UN, ITU, RSF, Freedom House, World Justice Project Rule of Law Index, Heritage Foundation, Pew Research Center Government Restrictions Index, UNESCO, Fund for Peace Fragile States Index, Reporters Without Borders.

for measuring and comparing countries is the Legatum welfare index. This index measures the social welfare situation in different countries. The Legatum Research Institute has published this index since 2007. This index is a combination of variables in eight areas, which are common to the social citizenship index in four areas of the economy, education, health, and individual freedoms, and differ in the areas of business opportunities, governance, social capital, security, and safety.

Also, in 2006, the EU Lifelong Learning Research Center developed the concept of active citizenship in four dimensions and assessed it in 19 European countries: citizens' political life (nine factors), citizens' civic activities in society (18 factors), activities Citizens' social status (25 factors), and citizens' values (11 factors). The results showed that Norway and Sweden had the highest rank, and Hungary and Poland had the lowest rank in terms of civic activities of citizens in society. Our findings also showed similar results.

The Quality of Life Index was used for the first time in 2005 to rank countries in the world based on nine factors: income status, job security, health, political freedom, gender equality (common to the social citizenship index), political stability, and security, family life, social life, climate, and geography. The Human Development Index (HDI) was also presented in three dimensions: life expectancy, education, and income to compare and measure the countries; our study also obtained education and economics. Other studies by constructing a composite index of economic well-being and measuring it in Kurdish countries showed that, on average, Morocco had the highest value of the IEWB index and Bangladesh had the lowest (23). In terms of growth rate, Turkey had the highest growth rate, and Bangladesh had the lowest growth rate. Iran did not have a good position and was ranked eighth. The economic and revenue factors of this index are similar to our results. The Combined Social Welfare Index was used to compare the provinces of Iran. The index includes information in various fields such as health, education, economy, employ-

ment, social security, and housing. The factors of health, economy and education were also obtained in the social citizenship index (24). The Social Welfare and Social Citizenship Index, which measures health and livelihood, is based on our findings (25).

The social citizenship index, a new index in this study, showed the changes in social citizenship better due to having more diverse dimensions and expressions. According to the approach of social expressions, it can be said that any policy that increases or decreases social expressions will play an effective role in changing social citizenship.

What seems certain is that social citizenship, like other indicators of assessing the state of societies, has its own characteristics, and tries to achieve a more accurate measurement. Gather valid data is important to measure social citizenship.

It seems that in international organizations such as Legatum, UN, etc., a special section should be created to provide statistics and information needed to measure social citizenship, which always monitors changes in social citizenship of countries, to provide policies and suggestions for its improvement in countries and the world, and to help improve the quality of life of all communities by providing proposed policies at the international level.

In general, it can be said that the index of social citizenship, due to the coverage of various dimensions affecting life, helps with the possibility of partial-general analysis and realistic measurements, as well as examining the effects of social policies on various aspects of society's life, and making appropriate decisions by transnational organizations and governments.

The results of this study showed that Iran had not a good position. But, it can improve its position by applying appropriate social policies in line with the international community. Also, in the field of building the Indigenous Index of Social Citizenship of Iran, it will be possible to evaluate and continuously monitor welfare policies and programs.

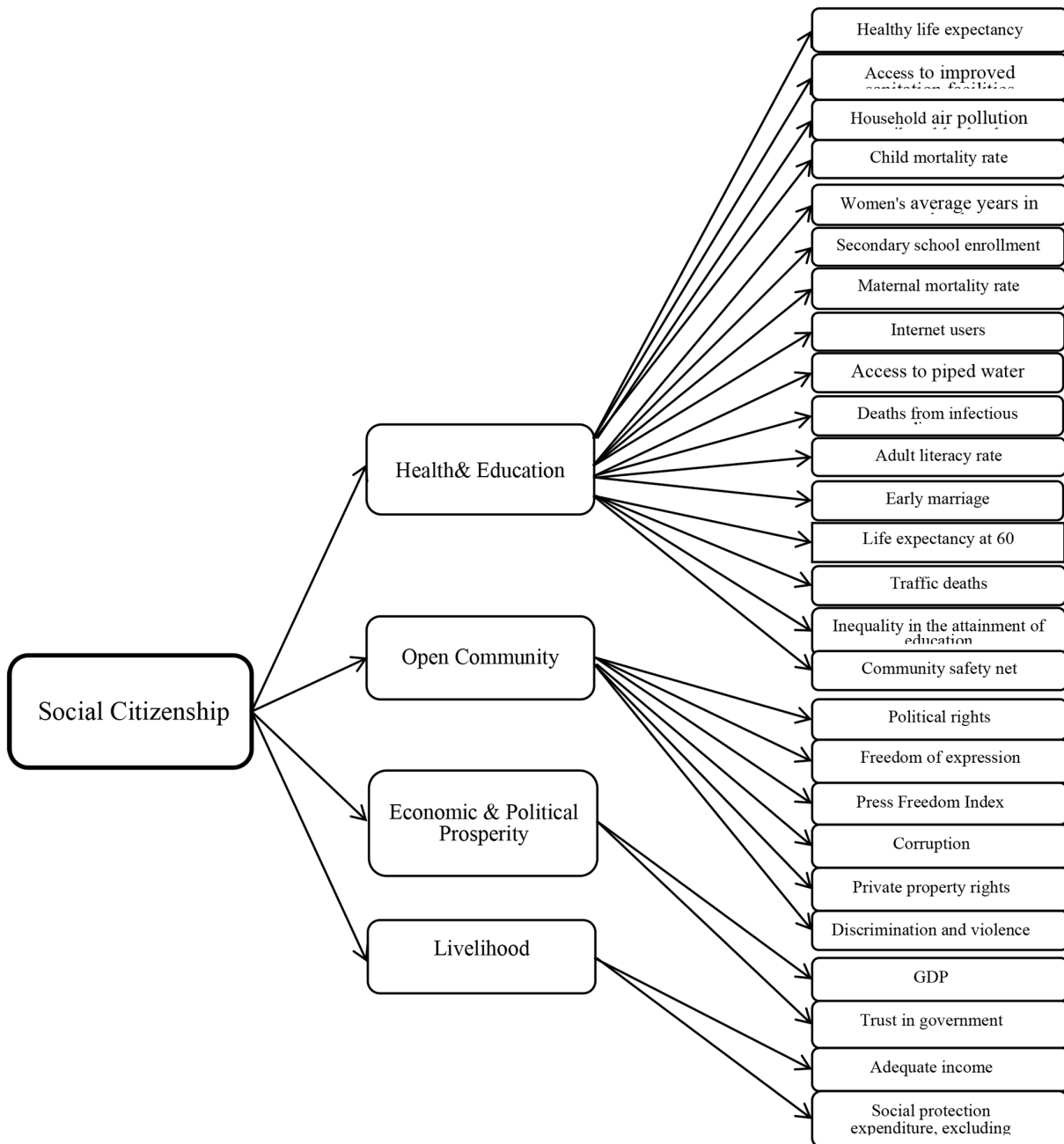


Figure 4. Index of social citizenship

5.1. Limitations of the Study

In this study, the lack of statistics and information of all countries in the world was the main limitation. Also, this research topic was new, and it was difficult to find reliable sources.

5.2. Conclusion

It can be concluded that the social citizenship index, due to the coverage of various effective dimensions and the possibility to be used for detailed and general analysis, helps to more accurately measure the quality of life and social welfare more accurately. In addition, by assessing

the effects of social policies on various aspects of society, it helps the government to make appropriate decisions. The results of this study, regarding the construction of an indigenous index of social citizenship, are expected to facilitate the continuous evaluation and monitoring of welfare and development policies and programs.

## Footnotes

**Authors' Contribution:** Study concept and design, M.H.; Analysis and interpretation of data, A.A.; Drafting of the manuscript, F.A.; Critical revision of the manuscript for important intellectual content, M.H.; Statistical analysis, A.A.; Study supervision, M.H.

**Conflict of Interests:** The authors have no conflict of interest.

**Ethical Approval:** USWR.REC.1396.264

**Funding/Support:** We did not receive any funding for this research. This research was a doctoral student thesis.

## References

- Abdollahi M. Analysis of the Concept of Citizenship and Evaluation of its Status in the Urban Laws, Regulations and Management. *Geogr Res Q.* 2008;**40**(2).
- Jensen B. 'Perceived social citizenship': A comparative study between two different hukous. *Citizensh Stud.* 2019;**23**(2):172-88. doi: [10.1080/13621025.2019.1584157](https://doi.org/10.1080/13621025.2019.1584157).
- Katrougalos GS. Jean Monnet Program, editor. *The (dim) perspectives of the European social citizenship.* New York, USA: New York University School of Law; 2007.
- Powell M. The Hidden History of Social Citizenship. *Citizensh Stud.* 2002;**6**(3):229-44. doi: [10.1080/1362102022000011595](https://doi.org/10.1080/1362102022000011595).
- Moses J. Social Citizenship and Social Rights in an Age of Extremes: T. H. Marshall's Social Philosophy in Theloungue DurÉE. *Mod Intellect Hist.* 2017;**16**(1):155-84. doi: [10.1017/s1479244317000178](https://doi.org/10.1017/s1479244317000178).
- Hong I. Immigration and the Boundaries of Social Citizenship in East Asia: Theoretical Considerations in a Comparative Perspective. *OMNES: The Journal of Multicultural Society.* 2018;**8**(2):37-66. doi: [10.15685/omnes.2018.01.8.2.37](https://doi.org/10.15685/omnes.2018.01.8.2.37).
- Danforth B, Stephens JD. Measuring social citizenship: Achievements and future challenges. *J Eur Public Policy.* 2013;**20**(9):1285-98. doi: [10.1080/13501763.2013.822910](https://doi.org/10.1080/13501763.2013.822910).
- Davis DE, Fernández JC. Collective Property Rights and Social Citizenship: Recent Trends in Urban Latin America. *Soc Policy Soc.* 2019;**19**(2):319-30. doi: [10.1017/s1474746419000459](https://doi.org/10.1017/s1474746419000459).
- Patrick R. Wither Social Citizenship? Lived Experiences of Citizenship In/Exclusion for Recipients of Out-of-Work Benefits. *Soc Policy Soc.* 2016;**16**(2):293-304. doi: [10.1017/s147474641600049x](https://doi.org/10.1017/s147474641600049x).
- Leisering L, Barrientos A. Social citizenship for the global poor? The worldwide spread of social assistance. *Int J Soc Welf.* 2013;**22**:S50-67. doi: [10.1111/ijsw.12046](https://doi.org/10.1111/ijsw.12046).
- Magnussen A, Nilssen E. Juridification and the Construction of Social Citizenship. *J Law Soc.* 2013;**40**(2):228-48. doi: [10.1111/1467-6478.2013.00621.x](https://doi.org/10.1111/1467-6478.2013.00621.x).
- Leonardi L, Scalise G. Social Citizenship in the Context of Europeanization and Growing Inequalities: An Empirical Contribution to the Theoretical Debate. *Società Mutamento Politica.* 2016;**7**(13):213-36.
- Yalçın-Heckmann L. Introduction: Claiming social citizenship. *Citizensh Stud.* 2011;**15**(3-4):433-9. doi: [10.1080/13621025.2011.564806](https://doi.org/10.1080/13621025.2011.564806).
- Panican A, Ulmestig R. Social rights in the shadow of poor relief – social assistance in the universal Swedish welfare state. *Citizensh Stud.* 2016;**20**(3-4):475-89. doi: [10.1080/13621025.2016.1139053](https://doi.org/10.1080/13621025.2016.1139053).
- Dean H. A post-Marshallian conception of global social citizenship. In: Isin EF, Nyers P, editors. *Routledge handbook of global citizenship studies.* London, UK: Routledge; 2014.
- Shi S. Towards Inclusive Social Citizenship? Rethinking China's Social Security in the Trend towards Urban-Rural Harmonisation. *J Soc Policy.* 2012;**41**(4):789-810. doi: [10.1017/s0047279412000517](https://doi.org/10.1017/s0047279412000517).
- Barbosa AP. Exploring Social Rights: Between Theory and Practice. *Eur J Int Law.* 2008;**19**(5):1110-2. doi: [10.1093/ejil/chn062](https://doi.org/10.1093/ejil/chn062).
- Leibetseder B, Gubrium E, Dierckx D, Fluder R, Hauri R, Raeymaeckers P. Subsidiarity and social citizenship: Social assistance schemes in Austria, Belgium, Switzerland and Norway. *Int J Soc Welf.* 2017;**26**(4):353-65. doi: [10.1111/ijsw.12241](https://doi.org/10.1111/ijsw.12241).
- Edmiston D, Humpage L. Resistance or resignation to welfare reform? The activist politics for and against social citizenship. *Policy Polit.* 2018;**46**(3):467-84. doi: [10.1332/030557316x14802575969590](https://doi.org/10.1332/030557316x14802575969590).
- Ben-Bassat A, Dahan M. Social rights in the constitution and in practice. *J Comp Econ.* 2008;**36**(1):103-19. doi: [10.1016/j.jce.2007.09.002](https://doi.org/10.1016/j.jce.2007.09.002).
- Almaspoor Khangah H, Jannati A, Imani A, Salimlar S, Derakhshani N, Raef B. Comparing the Health Care System of Iran with Various Countries. *Health Scope.* 2016;**6**(1).e34459. doi: [10.17795/jhealthscope-34459](https://doi.org/10.17795/jhealthscope-34459).
- Khorrami Z, Mirzaei M, Fadakar Davarani MM, Khanjani N. Measuring Liveability in Iranian Cities Using the Global Liveable City Index (GLCI). *Health Scope.* 2021;**10**(2).e112409. doi: [10.5812/jhealthscope.112409](https://doi.org/10.5812/jhealthscope.112409).
- Bakhtiari S, Ranjbar H, Ghorbani S. Composite index of economic well being and its measurement for selected developing countries. *Quarterly Journal of Economic Growth and Development Research.* 2013;**3**(9):58-41.
- Mohaqqei Kamal SH, Rafiey H, Sajjadi H, Rahgozar M, Abbasian E, Sharifian Sani M. Territorial analysis of social welfare in Iran. *J Int Comp Soc Policy.* 2020;**31**(3):271-82. doi: [10.1080/21699763.2015.1095580](https://doi.org/10.1080/21699763.2015.1095580).
- Böger T, Leisering L. *Social citizenship for older persons? Measuring the social quality of social pensions in the global south and explaining their spread.* Washington, USA: World Bank Group; 2017. doi: [10.1596/28285](https://doi.org/10.1596/28285).

Table 6. Rank of Countries in Components and Social Citizenship Index (n = 125) <sup>a</sup>

Country	Social Citizenship Index	Economic and Political Prosperity	Livelihood	Open Community	Health and Education
Finland	1	2	5	1	4
Sweden	2	4	7	3	2
Switzerland	3	6	1	6	9
Netherlands	4	8	3	7	7
Norway	5	10	4	5	8
Australia	6	7	10	11	3
Germany	7	3	6	13	15
United K	8	15	17	18	12
Denmark	9	9	14	4	11
Iceland	10	1	12	10	5
Ireland	11	13	8	9	16
Austria	12	14	2	12	10
Belgium	13	20	20	14	14
Japan	14	12	13	19	17
Spain	15	16	15	26	6
Estonia	16	21	29	20	22
Israel	17	24	18	50	1
Portugal	18	5	21	17	25
United S	19	17	27	21	28
Italy	20	23	24	37	13
Greece	21	19	23	44	24
Hungary	22	18	33	43	29
Slovenia	23	28	31	25	20
Canada	24	25	16	8	21
Lithuania	25	27	19	23	35
Slovakia	26	22	36	34	30
Poland	27	34	22	27	26
Latvia	28	30	49	36	34
France	29	31	28	29	23
New Zealand	30	29	34	2	31
Czech Re	31	56	86	24	19
Korea, R	32	26	9	31	27
Chile	33	32	52	16	36
Croatia	34	57	35	41	32
Cyprus	35	59	37	30	18
Uruguay	36	55	48	15	42
Costa Ri	37	61	38	22	39
Mauritius	38	58	39	28	54
Montenegro	39	46	44	65	38
Serbia	40	63	26	53	37
Romania	41	35	40	45	48
Bulgaria	42	36	41	56	40
Kuwait	43	11	25	76	44
Albania	44	39	42	51	47
Jamaica	45	62	89	32	58
Argentina	46	37	45	48	45
Panama	47	47	43	49	64
Macedonia	48	53	71	81	41
Ukraine	49	33	65	78	49
Belarus	50	43	46	111	33
Armenia	51	48	47	77	46
Turkey	52	40	11	101	43
Mexico	53	42	51	70	56

Colombia	54	52	56	66	65
Tunisia	55	65	98	61	69
Brazil	56	44	32	40	63
Malaysia	57	49	54	79	66
Lebanon	58	54	70	94	51
Moldova	59	64	69	63	60
Georgia	60	67	66	58	53
Peru	61	50	55	60	72
Ecuador	62	66	68	83	67
Kazakhstan	63	51	58	112	52
Jordan	64	60	60	82	57
El Salvador	65	75	57	54	80
Saudi Ar	66	38	53	107	61
Azerbaijan	67	72	59	117	55
Kyrgyzstan	68	69	62	95	71
Mongolia	69	73	82	39	79
Botswana	70	71	76	35	89
South Af	71	76	63	38	83
Honduras	72	74	72	86	82
Namibia	73	87	75	98	91
Bolivia	74	79	61	67	84
Sri Lanka	75	68	74	90	68
Thailand	76	82	64	104	70
Philippines	77	70	79	80	78
Russia	78	77	73	121	50
Paraguay	79	85	77	69	73
Indonesia	80	84	78	75	87
Dominica	81	86	83	59	81
Morocco	82	78	80	91	86
Egypt	83	81	84	116	75
China	84	45	30	120	62
Iran	85	41	50	123	74
Algeria	86	83	102	100	76
Nicaragua	87	80	101	85	85
Ghana	88	95	93	33	101
Senegal	89	91	92	46	104
Uzbekistan	90	88	81	125	59
Lesotho	91	93	85	52	105
Myanmar	92	120	95	114	90
Tajikistan	93	90	94	122	77
Guatemala	94	100	110	89	88
Cambodia	95	110	106	99	92
India	96	97	67	62	95
Malawi	97	104	103	55	112
Kenya	98	106	96	88	94
Laos	99	92	117	119	93
Nepal	100	102	91	92	97
Madagascar	101	111	88	57	114
Bangladesh	102	89	118	105	98
Benin	103	115	90	42	117
Congo, R	104	105	113	108	103
Togo	105	94	87	73	116
Nigeria	106	96	105	93	111
Mauritania	107	98	121	84	109
Tanzania	108	103	119	68	106
Uganda	109	107	114	97	108

<b>Liberia</b>	110	108	99	64	118
<b>Rwanda</b>	111	114	98	109	99
<b>Cameroon</b>	112	113	104	106	107
<b>Burkina</b>	113	99	100	47	120
<b>Pakistan</b>	114	101	112	103	96
<b>Yemen</b>	115	123	125	124	100
<b>Zimbabwe</b>	116	119	123	102	102
<b>Afghanis</b>	117	117	107	110	115
<b>Mozambique</b>	118	112	124	74	119
<b>Angola</b>	119	109	109	113	113
<b>Sierra L</b>	120	118	116	71	123
<b>Niger</b>	121	116	122	72	124
<b>Central</b>	122	125	115	118	110
<b>Ethiopia</b>	123	124	108	87	121
<b>Mali</b>	124	122	120	96	122
<b>Guinea</b>	125	121	111	115	125

<sup>a</sup> Sources: WHO, ILO, OECD, World Bank, World Happiness Report, Social Progress Index, Institute for Economics and Peace Global Peace Index, FAO, UN, ITU, RSF, Freedom House, World Justice Project Rule of Law Index, Heritage Foundation, Pew Research Center Government Restrictions Index, UNESCO, Fund for Peace Fragile States Index, Reporters Without Borders.