



INTERNATIONAL CENTER FOR RESEARCH AND RESOURCE DEVELOPMENT

ICRRD QUALITY INDEX RESEARCH JOURNAL

ISSN: 2773-5958, <https://doi.org/10.53272/icrrd>

DETERMINING THE RESPONSIBLE FACTORS OF PEOPLE'S HAPPINESS IN BANGLADESH

Tazia Hossain

Department of Business Administration, Notre Dame University Bangladesh, Dhaka 1000.

Corresponding Author: taziahossain23@gmail.com

Received: 09 November 2025 • Accepted: 19 January 2026 • Published: 29 January 2026

Abstract

This study aims to explore the underlying factors and reasons behind Bangladesh's low ranking (134th out of 143) in the 2025 World Happiness Report, despite noticeable economic progress. According to the Wellbeing Research Center (2025), the World Bank, GDP per capita is increasing while life satisfaction is decreasing in South Asia (South Asia development update). Some hidden factors prevent economic growth in South Asia from translating into higher levels of happiness and life satisfaction. The study investigates key determinants of happiness in Bangladesh. A primary survey of 400 respondents from Dhaka city as sample individuals is taken from diverse professional groups using a simple random sampling method, where 56.5% male and 43.5% female. Factor analysis is used to identify the key underlying factors responsible for happiness. The results for the data yield three factors that combine the 9 examined variables and reveal that happiness is affected by social, economic, and psychological factors. The factors extracted accounted for 55.706% of the total variance and were analyzed and identified. A reliability analysis of Cronbach's alpha's value is 0.718, which is evidence of good internal consistency. The study concludes that happiness and life satisfaction in Bangladesh require as much importance as economic growth. These findings have critical suggestions for policymakers, indicating the need for inclusive development strategies that address mental health, social support, and personal empowerment. It demands all-inclusive well-being and structural reforms, making this research highly significant for shaping future national policies.

Keywords: *Happiness, Social factor, Economic factor, Psychological factor.*

Cite as: Tazia Hossain (2026). Determining the Responsible Factors of People's Happiness in Bangladesh. *ICRRD Quality Index Research Journal*, 7(1), 127-139.

INTRODUCTION

Different people achieve happiness in different ways. Some enjoy cooking; some rarely go to the kitchen. Some enjoy spending money; some enjoy preserving the money for the future. But every person wants to be happy. However, are they happy? Happiness is not completely subjective but also objective. The good or bad feelings are subjective in the sense that it is sensed by a person. It may be on an objective basis, by the different involvement of different persons. Subjectively, the society's well-being can be determined through the level of life's happiness. Happiness, as everything that makes a person's life go well, is defined by Adler et al. (2017a, p. 22) [Ng, Y. K. (2022)]. Dambrun and Ricard (2011) said that lasting happiness is associated more with self-sacrifice rather than selfishness. Happiness is increasingly predictable as a key indicator of a nation's overall well-being, going beyond traditional economic measures like GDP. It reflects nationals' mental health, life satisfaction, social support, freedom, and quality of life. Happiness can be considered from two dimensions: endogenic factors (biological, mental, individual, and ethical) and exogenic factors (behavioral, social-cultural, and economic).

According to the World Happiness Report (WHR) 2025, Bangladesh ranked 134th out of 143 countries, signaling a happiness deficit. Despite economic improvements, the country struggles with issues like poverty, inequality, unemployment, political instability, and social insecurity, which contribute to this low score of happiness. The purpose and significance of the study are to identify the key factors behind Bangladesh's low happiness ranking and analyze the socio-economic and psychological reasons contributing to this happiness. Understanding these factors is crucial for formulating policies that can improve the quality of life of nationals and foster a more inclusive and supportive society.

LITERATURE REVIEW

Two components could determine whether or not a person is happy, namely the state of his mind and inner atmosphere. According to Diener (1985) and Carr (2004), one's happiness is influenced by two factors: one is cognitive, and the other is affective. The state of mind refers to one's pleasure in judging the life lived. While the inner atmosphere states feeling happy, romantic, and likes (Alam et al., 2025). Depression and anxiety are the inner atmosphere that can be either positive or negative.

Happiness and income

According to Mentzakis and Moro (2009) from the evidence of the Easterlin Paradox using the British Household Panel Surveys from 1996 to 2003; their outcomes show that the higher-income group enjoys higher subjective well-being than the low-income group.

Happiness and social support

A few studies demonstrate that individuals with high social support have a lower level of distress than

others with low social support (Siedlecki et al., 2014; Mitchell et al., 2011). That individuals who have high social support have low distress implies a higher level of happiness.

Happiness and freedom of choice

Current literatures approve a positive association between happiness and freedom of choice. The freedom to make a choice gives individuals an opportunity to choose and live the life of their own choice, which makes them satisfied and happy (Mohd Pauzi & Shahadat Hossen, 2025). Thus, people living in countries with greater freedom of choice can enjoy a higher level of happiness. Haller and Hadler (2004) study the relationship between freedom of choice and happiness using data from 41 nations from the World Value Survey and conclude that people's freedom of choice expressively effects their individual well-being as well as happiness.

According to Seligman (2002), eight external factors that affect individual happiness are money, marriage, social life, health, religion, positive emotions (e.g., fun, curiosity, love, pride), age, education, climate, race, and gender. According to Puspitorini (2012), the happiness of individuals can be caused by positive activities such as health, prosperity, friendship, knowledge, and virtue. Maslow's hierarchy of needs (1943, 1954/1970a/1987) is a hierarchy of five levels/stages.¹ [Ng, Y. K. (2021). The most basic level is the basic physiological needs of clothing, food, shelter, and sex, and then safety, including personal, employment, and health; followed by love, friendship, and belonging; and the fourth level of esteem, including achievement, being respected, and a good reputation. The highest fifth level is that of self-actualization. [Sumerlin, J. R., & Bundrick, C. M. (1996)].

The social factors are important for the happiness of individuals in society. This includes environmental quality, the distribution of incomes and wealth, freedom, democracy, government quality, social capital, etc (Helliwelland Huang 2008). According to Neira et al. 2019, Hudson 2006; Helliwelland Wang 2011; Helliwell et al. 2014; see Lu et al. 2020, b; see Ho 2013; happiness is influenced by social capital and social support. Happiness is influenced by individual, social, and economic factors. The literature review of various studies indicates that happiness is not solely a personal experience but is significantly formed by external conditions and relationships. Factors such as age, gender, and personality behaviors have been shown to correlate with subjective well-being, with social support playing a crucial role in enhancing happiness (Diener et al., 2021). Both physical and mental health are vital determinants, as individuals in better health report higher levels of happiness (Andrijić, 2022). Strong social support and relationships are important for happiness (Becchetti et al., 2008). The Human Development Index (HDI), income distribution, and low corruption levels are significant determinants of national happiness (Liao et al., 2021). Organizational factors and supportive policies are vital for enhancing job satisfaction and overall happiness for professionals (Muthuri et al., 2020).

Happiness or life satisfaction are used interchangeably, which is measured in the life ladder score (0–10) based on the World Happiness Report, in which the highest position on the ladder represents the best life, whereas the lowest position on the ladder shows the worst possible life of an individual

(Helliwell et al., 2021). Using the Gallup–Healthways well-being index, it is found that subjective well-being has two aspects: emotional well-being and life evaluation (Kahneman and Deaton, 2010). Global vs South Asian Context

The world's happiest countries are Finland, Denmark, and Iceland, securing scores very high in life satisfaction due to strong social support systems, high GDP per capita, good governance, and personal freedoms, with low corruption, better mental health conditions, and balanced emotional well-being with fewer negative emotions. Worldwide, Finland remains the happiest country for the 8th year, followed by Denmark and Iceland. Bangladesh has been ranked 134th out of 147 countries in the 2025 World Happiness Report, its lowest ranking ever, sliding from 129th out of 143 last year. With an average life assessment score of just 3.851 out of 10, Bangladeshis are happier than in only 13 countries globally. In contrast, South Asian countries like Bangladesh, India, Pakistan, and Sri Lanka remain in much lower ranks (Alam et al., 2025). They face constrained social support, economic hardship, political instability, and extensive corruption. While South Asians often express high positive emotions, they are also involved in significantly higher negative emotions like stress, worry, and sadness, which disclose deep social and psychological pressure. Key Reasons for South Asia's lower happiness are low income and economic insecurity, weak public services and social support, corruption and lack of trust in institutions, limited personal freedom and choice, mental health and stress from social pressure, high inequality in wealth and opportunities, political instability and poor governance, and disaster risks.

RESEARCH OBJECTIVES AND QUESTIONS

The main objective of the study is as follows:

- To explore the main factors responsible for happiness in Bangladesh.
- To suggest actionable recommendations to improve national happiness levels.

To set the gold standard of achievement of research objectives following questions have been established to find the solutions. In spite of economic growth, Bangladesh experiences a significant happiness deficit due to unmet psychological, social, and emotional needs, with factors such as lack of work-life balance, poor mental health, lack of social support, and limited personal freedom playing a greater role than income alone in determining overall well-being. The main research question is: What are the underlying factors that are responsible for Bangladesh's low happiness ranking?

RESEARCH METHODOLOGY AND DATA COLLECTION

This study uses a quantitative research method to discover the factors contributing to Bangladesh's happiness deficit using a Likert scale questionnaire. A survey was conducted among 400 individuals from Dhaka city as a representative of Bangladeshi people using a simple random sampling technique from diverse socio-economic backgrounds, including corporate employees, laborers, students, housewives, unemployed individuals, and professionals. The questionnaire included structured questions, covering aspects such as occupation, mental and physical health,

mindset, emotional responses, and life happiness ratings.

Data were collected through face-to-face interviews and written responses, allowing participants to express their happiness ratings through a Likert scale. Data were analyzed using basic statistical methods (e.g., frequency distribution), and factor analysis was used to identify the underlying factors of happiness deficit (Rashed et al., 2025). This multi-dimensional analysis offers a deeper understanding of the gap between economic progress and subjective well-being in Bangladesh.

VARIABLE

Happiness is recorded from 0 to 10 from individual interviews according to their perception of happiness, 0 at the bottom to 10 at the top of the ladder (0 = worst, 10 = best). Questions were asked whether they have family support, social support, freedom of choices, emotional feelings (i.e., happiness, laughter, and enjoyment) during most of the day yesterday, the Country's negative and positive affect on emotional well-being. The variables used in the preparation of the questionnaire include education, health, employment, income, environmental conditions, security, domestic harmony, social relations, leisure time availability, home ownership and facilities, transportation, affection, and happiness.

METHODOLOGY

Factor Analysis

Factor analysis is a statistical method that reduces a large number of experimental variables into a smaller number of factors, thereby identifying patterns and relationships within complex datasets. In this study, the main focus is given to the application of factor analysis to reduce a large number of intercorrelated variables to a few factors. Secondly, factor analysis is used to simplify the data by removing irrelevant variables. For obtaining factor results, principal component analysis is used. This study has used principal component analysis (PCA), as the purpose of the study is to examine the data in order to obtain the minimum number of factors that best represent the data set. To examine the effect of socio-economic variables on energy poverty, factor analysis with principal components extraction was used.

The factor analysis model

$$X = \mu + \lambda F + \varepsilon,$$

Where,

λ ,is the matrix of factor loading, which demonstrates the correlation between each observed variable and each factor.

X , is the vector of observable variables.

F , is the vector of unobservable latent factors.

ε , denotes the vector of latent error terms.

Data Analysis Results

The descriptive statistics are presented with mean and standard deviation in Table 1. After sample screening and elimination, a total of 400 valid data points are included in the study.

Table 1: Descriptive Statistics

	Mean	Std. Deviation	Analysis N
Employment status	1.97	1.234	400
Stress anxiety	3.15	1.072	400
Mental health	2.57	1.137	400
Social support	1.99	.860	400
Feel lonely	2.39	1.030	400
Satisfied financial situation	2.59	1.201	400
Financial situation affects happiness	2.69	1.227	400
Lacking time	2.64	1.247	400
Personal and professional life balance	2.35	.905	400

Here, in Table 2, the highest value of extracted communalities is 0.663, which indicates that “mental health” is a valid variable for happiness. Some variables are omitted from the analysis, which have an extraction value of less than 0.5. The analysis is continued with 9 variables.

Table 2: Communalities

Communalities		
	Initial	Extraction
Employment status	1.000	.499
Stress anxiety	1.000	.604
Mental health	1.000	.663
Social support	1.000	.639
Feel lonely	1.000	.660
Satisfied financial situation	1.000	.622
Financial affects happiness	1.000	.536

Lacking time	1.000	.324
Personal and professional life balance	1.000	.466
Extraction Method: Principal Component Analysis.		

A reliability analysis is conducted with 9 variables. It is known that Cronbach's alpha values are regarded as acceptable when they are 0.70 or above. (Nunally, 1978). Here, the Cronbach's alpha's value is 0.718, which is evidence of good internal consistency.

Table 3: Reliability Statistics

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
0.718	0.734	9

Kaiser-Meyer-Olkin (KMO) measure (Kaiser,1970) is used to evaluate the sample's adequacy with the 0 to 1. In this study, the Kaiser-Meyer-Olkin measure of sampling adequacy is 0.7.91, which is very good. Therefore, the factor analysis technique is acceptable for this data.

Table 4: KMO and Bartlett's Test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.719
Bartlett's Test of Sphericity	Approx. Chi-Square	609.288
	df	36
	Sig.	0.000

According to Cattell (1966), the Screen plot is used to explore a graphical representation of eigenvalues visually. Based on the screen plot described above, the study found the presence of 3 factors. Factor 1 thus accounted for 31.090% of the overall variation. Factor 2 accounted for 12.964% and factor 3 accounted for 11.652% of the overall variation.



Figure 1: Scree Plot

Table 5 determines the eigenvalues and total variance explained by the extraction method of factor analysis that is used in this study is principal component analysis. Before extraction, 9 components are identified in the data set. After extraction and rotation, there are 3 different linear components within the data set for which the eigenvalue is greater than 1. The 3 factors are extracted for a combined 55.706 % of the total variance. The result demonstrates that 55.706% of the common variance shared by 9 variables can be described by 3 factors. This is the reflection of the KMO value, 0.719, which can be considered good and also specifies that factor analysis is useful for the variables. The first component has explained 31.090% of the total variance with an eigenvalue of 2.798. The second component explained 12.964% variance with an eigenvalue of 1.167. The third component explained 11.652% variance with an eigenvalue of 1.049.

Table 5: Total Variance Explained

Initial Eigenvalues	Total Variance Explained							
			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
2.798	31.090	31.090	2.798	31.090	31.090	1.791	19.897	19.897
1.167	12.964	44.053	1.167	12.964	44.053	1.709	18.993	38.891
1.049	11.652	55.706	1.049	11.652	55.706	1.513	16.815	55.706
0.970	10.779	66.485						
0.937	10.407	76.892						
0.657	7.301	84.192						
0.523	5.807	89.999						

0.497	5.524	95.523						
0.403	4.477	100.000						

Factor or component 1 accounted for significantly more variance than the remaining ones (31.090% compared to 12.964% and 11.652%).

Table 6: Rotated Component Matrix

Rotated Component Matrix			
	Component		
	1	2	3
Employment status	0.278	0.227	-0.609
Stress anxiety	0.382	0.243	0.632
Mental health	0.235	0.372	0.685
Social support	0.776	0.118	-0.153
Feel lonely	0.753	-0.010	0.307
Satisfied with the current financial situation	0.005	0.788	0.017
Financial situation affects happiness	0.213	0.700	0.030
Lacking time	0.521	0.207	0.097
Personal and professional life balance	0.165	0.541	0.382
Extraction Method: Principal Component Analysis.	Rotation Method: Varimax with Kaiser Normalization.		
a. Rotation converged in 6 iterations.			

The result suggests that three hidden factors, social factor, economic factor, and psychological factor, are associated with happiness. Social support, feeling lonely, and lacking time are substantially loaded (with a value more than 0.5) on factor 1, the social factor. Being satisfied with the current financial situation is essential for their well-being. Financial situation affects happiness, satisfaction with the current financial situation, and personal and professional life balance are substantially loaded (values more than 0.5) on factor 2, the economic factor. Stress-anxiety, mental health, and employment status are substantially loaded (values more than 0.5) on factor 3, the psychological factor.

RELIABILITY AND VALIDITY TEST

Partial Least Squares (PLS) is used to analyze complex relationships between variables, which is a variance-based statistical modeling method. It is especially popular in the fields of psychology and social sciences. The internal consistency is established by calculating Cronbach's alpha to test the instrument's accuracy and reliability. The acceptable threshold value for Cronbach's alpha is more than 0.7. In Table 8, the economic factor, psychological

factor, and social factor have Cronbach's alpha values 0.535, 0.715, and 0.596, respectively, which confirmed the reliability of the survey instrument. The Composite reliability is 0.811, 0.875, and 0.83 > 0.7. It indicates the internal uniformity in scale items. It shows that the variables display a correlation with their component alliance and thus they are internally consistent (Rahman, Hossain, et al., 2025). The convergent validity is recognized when the average variance extracted (AVE) is ≥ 0.5 . The AVE values corresponding to the components, economic, psychological, and social, are 0.682, 0.778, and 0.71, respectively. According to Fornell and Larcker (1981), AVE ≥ 0.5 approves convergent validity, and it can be realized that all the AVE values in Table 8 are greater than or equal to 0.5.

Table 7: Reliability, Composite Reliability (CR), and Average Variance Extracted (AVE).

	Cronbach's alpha	Composite reliability (rho_c)	Average variance extracted (AVE)
economic factor	0.535	0.811	0.682
psychological factor	0.715	0.875	0.778
social factor	0.596	0.83	0.71

RESULT AND DISCUSSION

The results for the data yield three factors. The analysis process is acceptable, as the Kaiser–Meyer–Olkin [KMO] value is 0.719. The factors extracted accounted for 55.706% of the total variance and were analyzed and identified. Three factors, economic factor, psychological factor, and social factor, are identified as the key factors behind Bangladesh's low happiness and life satisfaction.

RECOMMENDATION

To improve happiness in Bangladesh, the government, along with society need to focus more on mental health, fair job opportunities, stronger social support systems, and efforts to reduce stress and inequality.

LIMITATION

This analysis is based on primary data; sometimes, people give biased responses, which may lead to a misleading interpretation.

ETHICAL ISSUES

Ethical issues, including informed consent from respondents, have been maintained in the study.

CONCLUSION

Happiness is an innovative concept in positive psychology. Although everyone uses this concept as a clear and common concept, it has a complex meaning and is composed of several factors. This study shows that happiness in Bangladesh is affected by more than just money. Even if the country's economy is improving, most of the people still feel unhappy, stressed, or hopeless in their daily lives. The survey results prove that variables like stress and anxiety, social support, work-life balance, employment status, mental pressure, and support from family play an immense role in making people feel less happy. The hidden factors, including social, economic, and psychological factors, are responsible for people's happiness. A large number of people feel stuck, frustrated, and unhappy with their lives, and only a small group believes that their lives will improve in the future. These emotional struggles show that economic progress alone cannot guarantee happiness. This study is important because it helps us understand what people truly need to live a happy life; it is not just money, but people want stability, support, and a little hope for a better future. Happiness and well-being should be introduced as key policy goals, not secondary to economic growth. An all-inclusive approach that addresses mental health, social connection, equitable income, and personal freedom will foster sustainable happiness and human development in Bangladesh.

REFERENCE

- Andrijić, M. (2022). Economics and happiness—key insights and latest findings. *Ekonomika misao i praksa*, 31(1), 257-275.
- Abate, H. K., & Mekonnen, C. K. (2021). Job satisfaction and associated factors among health care professionals working in public health facilities in Ethiopia: a systematic review. *Journal of multidisciplinary healthcare*, 821-830.
- Alam et al., 2025. (2025). Online Corrective Feedback and Self-Regulated Writing: Exploring Student Perceptions and Challenges in Higher Education. 15(06), 139–150.
- Alam, J., Hossen, M. S., Nawaz, I., Rahman, S., & Mahmood, A. (2025). Black Magic and Dark Tourism Impact Mental Well-being of Gender: A Standpoint of Embodiment Theory With Emotional Experience.
- Becchetti, L., Pelloni, A., & Rossetti, F. (2008). Relational goods, sociability, and happiness. *Kyklos*, 61(3), 343-363.
- Carr, A. (2013). *Positive psychology: The science of happiness and human strengths*. Routledge.
- Dambrun, M., & Ricard, M. (2011). Self-centeredness and selflessness: A theory of self-based psychological functioning and its consequences for happiness. *Review of general psychology*, 15(2), 138-157.
- Diener, E. D., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of personality assessment*, 49(1), 71-75.
- Rahman, M. K., Hossain, M. A., Ismail, N. A., Hossen, M. S., & Sultana, M. (2025). Determinants of students' adoption of AI chatbots in higher education: the moderating role of tech readiness. *Interactive Technology*
<https://doi.org/10.53272/icrrd.v7i1.2>

and Smart Education.

- Diener, E., Heintzelman, S. J., Kushlev, K., Tay, L., Wirtz, D., Lutes, L. D., & Oishi, S. (2017). Findings all psychologists should know from the new science on subjective well-being. *Canadian Psychology/psychologie canadienne*, 58(2), 87.
- Haller, M., & Hadler, M. (2004). Happiness as an expression of freedom and self-determination: a comparative multilevel analysis. In *Challenges for quality of life in the contemporary world: Advances in quality-of-life studies, theory and research* (pp. 207-231). Dordrecht: Springer Netherlands.
- Helliwell, J. F., & Huang, H. (2008). How's your government? International evidence linking good government and well-being. *British journal of political science*, 38(4), 595-619.
- Helliwell, J. F., Layard, R., Sachs, J. D., & Neve, J. E. D. (2021). World happiness report 2021.
- Helliwell, J. F., Huang, H., & Wang, S. (2014). Social capital and well-being in times of crisis. *Journal of Happiness Studies*, 15(1), 145-162.
- John, F. H., & Shun, W. (2011). Trust and wellbeing. *International Journal of Wellbeing*, 1(1), 42-78.
- Ho, L. S. (2013). *The psychology and economics of happiness: Love, life and positive living*. Routledge.
- Kahneman, D., & Deaton, A. (2010). High income improves evaluation of life but not emotional well-being. *Proceedings of the national academy of sciences*, 107(38), 16489-16493.
- Liao, T. F. (2021). Income inequality, social comparison, and happiness in the United States. *Socius*, 7, 2378023120985648.
- Lu, H., Tong, P., & Zhu, R. (2020). Longitudinal evidence on social trust and happiness in China: causal effects and mechanisms. *Journal of Happiness Studies*, 21(5).
- Mentzakis, E., & Moro, M. (2009). The poor, the rich and the happy: Exploring the link between income and subjective well-being. *The Journal of Socio-Economics*, 38(1), 147-158.
- Mitchell, M. E., Lebow, J. R., Uribe, R., Grathouse, H., & Shoger, W. (2011). Internet use, happiness, social support and introversion: A more fine grained analysis of person variables and internet activity. *Computers in Human Behavior*, 27(5), 1857-1861.
- Muthuri, R. N. D. K., Senkubuge, F., & Hongoro, C. (2020, June). Determinants of motivation among healthcare workers in the East African community between 2009–2019: a systematic review. In *Healthcare* (Vol. 8, No. 2, p. 164). MDPI.
- Mohd Pauzi, H., & Shahadat Hossen, M. (2025). Comprehensive bibliometric integration of formal social support literature for elderly individuals. *Housing, Care and Support*, 1–17.
- Neira, I., Lacalle-Calderon, M., Portela, M., & Perez-Trujillo, M. (2019). Social capital dimensions and subjective well-being: A quantile approach. *Journal of Happiness Studies*, 20(8), 2551-2579.
- Ng, Y. K. (2022). *Happiness—Concept, measurement and promotion* (p. 183). Springer Nature.
- Ng, Y. K. (2021). Factors affecting happiness. In *Happiness—Concept, Measurement and Promotion* (pp. 99-114).

Singapore: Springer Nature Singapore.

- Oishi, Shigehiro, Ed Diener, and Richard E. Lucas. "Subjective well-being: The science of happiness and life satisfaction." (2021).
- Puspitorini, Y. W. (2012). *Prosocial behavior and happiness* (Doctoral dissertation, Thesis. Publication: Faculty of Psychology, Catholic University of Soegijapranata).
- Rashed, M., Jamadar, Y., Hossen, M. S., Islam, M. F., Thakur, O. A., & Uddin, M. K. (2025). Sustainability catalysts and green growth: Triangulating evidence from EU countries using panel data, MMQR, and CCEMG. *Green Technologies and Sustainability*, 100305.
- Seligman, M. E. (2004). *Authentic happiness: Using the new positive psychology to realize your potential for lasting fulfillment*. Simon and Schuster.
- Siedlecki, K. L., Salthouse, T. A., Oishi, S., & Jeswani, S. (2014). The relationship between social support and subjective well-being across age. *Social indicators research*, 117(2), 561-576.
- Sumerlin, J. R., & Bundrick, C. M. (1996). Brief index of self-actualization: A measure of Maslow's model. *Journal of Social Behavior and Personality*, 11(2), 253.



This is an Open Access article distributed under the terms of the Creative Commons Attribution 4.0 International License (<https://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium upon the work for non-commercial, provided the original work is properly cited.