



Policy Journal of Social Science Review



Well-Being Dimensions and Environmental Protection: The Role of Health, Life Satisfaction, and Financial Satisfaction

Waqas Shair^{1*}

Shaher Bano²

Haleema Afzal³

Rizwan ul Hassan⁴

Usman Bashir⁵

Well-Being Dimensions and Environmental Protection: The Role of Health, Life Satisfaction, and Financial Satisfaction

Waqas Shair	Senior Lecturer, School of Economics & Finance, Minhaj University Lahore, Pakistan. Corresponding Author Email: waqasshair689@gmail.com
Shaher Bano	Assistant Professor, Government of the Punjab, Higher Education Department, Pakistan
Haleema Afzal	Independent Researcher, Pakistan
Rizwan ul Hassan	Lecturer, The Lahore ALMA, Lahore, Pakistan
Usman Bashir	National College of Business Administration & Economics (NCBA&E), Pakistan

Abstract

This research examines the impact of individuals' subjective well-being (SWB) on their likelihood of prioritizing environmental protection over economic growth. SWB is assessed through key indicators, including health status, life satisfaction, and financial satisfaction. The study utilizes data from the 7th wave of the World Values Survey (WVS), comprising 87,000 participants after accounting for missing observations. A binary logistic regression model is employed to analyze the dichotomous dependent variable. The analysis reveals that better health status increases the likelihood of prioritizing the environment. Financial satisfaction also positively influences environmental prioritization by reducing economic pressures, enabling support for sustainable policies. Similarly, life satisfaction enhances environmental prioritization, as content individuals focus on long-term collective goals, recognizing the importance of a healthy environment for well-being. These findings suggest that secure health, finances, and life satisfaction foster a broader perspective, encouraging pro-environmental attitudes and behaviors while balancing personal prosperity with societal benefits. The study highlights the role of well-being in promoting environmental stewardship and shaping sustainable development policies.

Keywords: Environment, Economic growth, Financial satisfaction, Life satisfaction, Health Outcome, Subjective wellbeing

INTRODUCTION

Sustainable development, defined as meeting present needs without compromising future generations, is increasingly vital due to environmental degradation, resource depletion, and climate change (Cassen, 1987)). The United Nations' 2030 Agenda for Sustainable Development, with its 17 Sustainable Development Goals (SDGs), emphasizes balancing economic growth, social equity, and environmental sustainability. Environmental sustainability is particularly critical, as environmental degradation impacts food security, health, and economic stability. Achieving environmental sustainability requires individuals to prioritize environmental concerns. Economists are increasingly interested in factors influence individuals' trade-offs between environmental protection and economic growth. In this regard, subjective well-being (SWB), including health, life, and financial satisfaction, plays a key role in shaping individuals' attitudes toward environmental issues. Research indicates a positive correlation between pro-environmental behavior and SWB, highlighting the importance of aligning well-being with sustainability goals (Nguyen et al., 2024; Zenios, 2024).

One important element of subjective wellbeing is financial satisfaction. People may advance up Maslow (1954) hierarchy of wants as their financial satisfaction rises, emphasizing environmental awareness and personal development more. Financial satisfaction can guide behavior beyond just income levels. For example, people who are more financially satisfied are likely to engage in more responsible financial behaviors. For instance, individuals who are satisfied with their financial situation are more likely to engage in consumer behaviors that are more sustainable in the long term, such as spending responsibly and focusing on financial goals (Cameron ,2012). A greater preference to contribute to environmental security and demonstrate greater environmental care is correlated with higher financial satisfaction (Torgler & García-Valiñas, 2007; Sulemana, 2016; Yasmeeen et al., 2024; Yan, S. & Sriboonchitta, 2024).

Life satisfaction is a key component of subjective well-being. The term 'life satisfaction' describes how someone feels about their life generally. It is a mental assessment of how well or poorly you believe your life is going on (Diener, 1984). If someone is more content with their life, they are considered to have a high SWB. People who are dissatisfied with life, do not feel much joy, and get angry or anxious easily are considered to have low subjective wellbeing. According to Diener (1984), life satisfaction can be conceptualized as a state of equilibrium between one's positive and negative feelings. Because those who are more satisfied with their lives may have a better awareness of how intertwined the world's problems are, cognitive assessments of life satisfaction frequently direct people toward sustainable development goals. As a result, they are more inclined to support policies that strike a balance between environmental sustainability and economic growth. A person will care more for the environment as his or her level of life

satisfaction rises (Welsch & Kühling, 2010). The researchers found a positive impact of life satisfaction of Chinese people on their proenvironmental behavior (Wang & Kang, 2019).

One of the important indicators of subjective wellbeing is health status of individuals. People's willingness to donate income is negatively and strongly connected with their overall state of good health. Put another way, rather than being simply helpful toward the environment, people in some countries may be concerned about the environment because they perceive health risks associated with environmental degradation. People who believe that their health is good or very good are less inclined to choose the environment (Sulemana et al., 2016). Individuals in good health may prioritize policies that promote environmental sustainability (Barrett, 2005; Ahmad & Alvi, 2024).

As far as the demographic factors are concerned the females are seen as 'caregivers and nurturers,' it is asserted that females are more likely than men to be environmentally conscious. (Arnocky & stroink, 2010; Zelezny et al., 2000; Olli et al., 2001; Steel ,1996; Tranter, 2011; 2013; Torgler & Garcia-Valiñas, 2007; Givens & Jorgenson, 2011; Čábelková et al., 2023; Nili & Asadi, 2024; Audi, 2024). Some publications indicate that there is a negative relationship between environmental concern and age. Since older people are less likely to support environmental conservation since they would not be around to enjoy its benefits in the future, it makes sense that younger people are frequently more concerned about the environment than older people (Gerhards & Lengfeld, 2008; Jones & Dunlap, 1992; Torgler & Garcia-Valiñas, 2007; Sulemana, 2016; Gan et al., 2008; Combes et al., 2018; Tranter,2011; 2013; Olli et al., 2001; Sulehri et al., 2024; Čábelková et al., 2023 ; Gelissen, 2007).

People in cities are more likely to care about the environment than people in rural places because pollution is more likely to cause environmental problems (Israel & Levinson, 2004; Jones & Dunlap, 1992; Sulemana, 2016; Bastida, 2023; Čábelková et al., 2023; Sulehri et al., 2024). Married individuals are more likely to prioritize economic growth over environmental concerns, whereas unmarried individuals tend to focus more on the environment (Xu & Li, 2018; Sulemana, 2016). The impact of higher education is positive in prioritizing environment (Olli et al., 2001; Xu & Li, 2018; Bastida, 2023; Sulehri & Ali, 2024; Torgler & García-Valiñas, 2007; Kimmelmeier et al., 2002; Jones & Dunalp, 1992; Wee et al., 2008; Combes et al., 2018; Gugushvili, 2021; Gelissen, 2007). The objective of this study is to assess impact of subjective well-being on individual's choice towards environmental protection over growth. The subjective well-being is measured in terms of terms of one's health outcome, overall life satisfaction, and financial satisfaction. Through robust empirical analysis and heterogeneity analysis, this study explores whether enhancing SWB can foster environmental protection across the region and gender. The empirical findings of the study provide valuable insights for policymakers to

promote sustainability while addressing social and psychological determinants of decision-making.

METHODOLOGY, DATA, AND INSIGHTS

ECONOMETRIC MODEL

The study utilizes the most recent data from the 7th wave of the World Values Survey (WVS), which includes responses from over 92,000 participants across 66 countries. However, after adjusting the missing observation, the sample available for analysis is limited to 87,000 participants. This research seeks to examine the influence of individuals’ subjective well-being on their likelihood of prioritizing either environmental protection or economic growth. Subjective well-being is measured using key indicators, including health status, life satisfaction, and financial satisfaction. To explore this relationship, a binary logistic regression model is employed, as the dependent variable is dichotomous in nature (Shair et al., 2022; 2023). The econometric specification of the model utilized in this study is as follows:

$$Environment\ priority_i = \alpha_0 + \sum_{k=1}^5 \alpha_{k1} Health_{ki} + \alpha_2 Life\ satisfaction_i + \alpha_3 Financial\ satisfaction_i + \alpha_4 Age_i + \alpha_5 Female_i + \alpha_6 Rural_i + \sum_{k=1}^3 \alpha_{k7} Marital\ status_{ki} + \sum_{k=1}^3 \beta_{k8} Education_{ki} + \epsilon_i$$

In this framework, *i* refers to individual observations, *k* signifies the categories of the specified variable, α_s denote the coefficients to be estimated, and ϵ_i represents the error term. The operational definitions and descriptions of the variables employed in the study are presented in Table 1.

TABLE 1

Variables	Description
Prioritizing environment	A binary variable coded 1, if individual responded prioritizing environment, 0 if prioritize growth.
Subjective wellbeing indicators:	
Health status:	An ordinal categorical variable on the status of health of individual which consist of following categories: Very poor, Poor, Fair, Good, and Very good
Financial satisfaction	An ordinal variable on a scale varies from 1 to 10, where 1 states minimum financial satisfaction and 10 states maximum financial satisfaction.
Life satisfaction	An ordinal variable on a scale varies from 1 to 10, where 1 states minimum life satisfaction and 10 states maximum life satisfaction.
Covariates:	

Female (=1)	A binary variable coded 1 for female respondent, 0 otherwise.
Age	Age in years old.
Rural (=1)	A binary variable coded 1 for urban resident respondent, 0 otherwise.
Education	An ordinal categorical variable which consist of following categories: Lower, Middle, and Higher. These categorization is comprehensively defined in the world value survey.
Marital status	A multinomial categorical variable which consist of following three categories: Currently married, Formerly married, and Never married. The formerly married category consist of individuals who are divorced, widowed, and separated.

DESCRIPTIVE ANALYSIS

The descriptive statistics for the variables in the study are summarized in Table 2. The variable Prioritizing Environment represents whether respondents prioritize environmental concerns over economic growth. In the whole sample, the mean value for prioritizing the environment is 0.589, with a standard deviation of 0.492, indicating that approximately 59% of respondents prioritize the environment. The mean for the complementary category, prioritizing growth, is 0.411, reflecting that 41% of respondents favor economic growth over environmental concerns. The descriptive statistics provide an overview of the sample characteristics and highlight differences between individuals who prioritize the environment versus those who prioritize economic growth. The subjective well-being indicators are analyzed using health status, financial satisfaction, and life satisfaction.

Health Status is presented as the proportion of respondents in each category. In the overall sample, most individuals reported their health as ‘Good’ (44.3%) or ‘Fair’ (27.4%), while fewer reported ‘Very Poor’ (1.1%) or ‘Poor’ (5.1%). Among those prioritizing the environment, a slightly higher proportion rated their health as ‘Good’ (44.9%) or ‘Very Good’ (22.5%) compared to those prioritizing growth, where the corresponding proportions were 43.9% and 21.8%, respectively. Conversely, individuals prioritizing growth reported marginally higher rates of ‘Very Poor’ (1.4%) and ‘Poor’ (5.3%) health.

Financial Satisfaction, measured on a scale from 1 to 10, shows that the overall mean was 6.21. Those prioritizing the environment reported a slightly higher mean financial satisfaction (6.33) than those prioritizing growth (6.05). Life Satisfaction, also measured on a scale from 1 to 10, indicates an overall mean of 7.06. Respondents prioritizing the environment exhibited a higher mean life satisfaction (7.19) compared to those prioritizing growth (6.90). These descriptive statistics suggest that individuals prioritizing the environment generally report better health, higher financial satisfaction, and greater life satisfaction compared to those

prioritizing growth. This pattern highlights potential associations between value orientation and subjective well-being.

The descriptive statistics for the covariates provide insights into the demographic and socio-economic composition of the sample and compare individuals prioritizing the environment versus those prioritizing economic growth. Gender Distribution reveals that the overall sample is slightly skewed toward females (52.6%) compared to males (47.4%). This pattern is consistent across both groups, with individuals prioritizing the environment showing a marginally higher proportion of females (52.9%) compared to those prioritizing growth (51.0%). Residential Area indicates that the majority of respondents reside in urban areas (67.8%), while 32.2% live in rural areas. The urban-rural distribution remains fairly consistent across the two groups, with those prioritizing the environment having a slightly higher urban representation (68.1%) compared to those prioritizing growth (66.5%).

Education Levels differ notably between the two groups. In the whole sample, education levels are relatively evenly distributed across lower (31.7%), middle (34.9%), and higher (33.4%) categories. However, individuals prioritizing the environment are more likely to have higher education (36.6%) compared to those prioritizing growth (28.5%), whereas the latter group shows a higher proportion in the lower education category (35.5% versus 29.3%). Marital Status shows that most respondents are currently married (63.6%), with smaller proportions being formerly married (12.3%) or never married (24.1%). The proportion of currently married individuals is slightly higher among those prioritizing growth (65.0%) compared to those prioritizing the environment (62.9%). Conversely, those prioritizing the environment have a higher percentage of never-married individuals (25.3% versus 22.6%).

TABLE 2: DESCRIPTIVE STATISTICS

Variables	Whole sample				Prioritizing environment sample	Prioritizing growth sample
	Mean	Std. dev.	Min	Max	Mean	Mean
Prioritizing environment:						
No	.4105248	.4919318	0	1		
Yes	.5894752	.4919318	0	1		
Subjective wellbeing indicators:						

Health status:

Very poor	.0114076	.1061959	0	1	.0093373	.013731
Poor	.0514373	.2208891	0	1	.048107	.0534559
Fair	.2735243	.4457699	0	1	.268168	.2762249
Good	.4429672	.4967392	0	1	.4493835	.4386318
Very good	.2206636	.4146962	0	1	.2250043	.2179564
Financial satisfaction	6.208986	2.427157	1	10	6.332935	6.054257
Life satisfaction	7.06213	2.239034	1	10	7.193335	6.898957

Covariates:

Male	.473565	.4993033	0	1	.4711739	.4896346
Female	.526435	.4993033	0	1	.5288261	.5103654
Age	43.17765	16.58287	16	103	42.74385	43.42269
Urban	.6781742	.467179	0	1	.6814528	.6654987
Rural	.3218258	.467179	0	1	.3185472	.3345013

Education:

Lower	.317112	.4653539	0	1	.2928006	.355081
Middle	.3489896	.4766531	0	1	.3412415	.3599605
Higher	.3338984	.4716064	0	1	.3659579	.2849585

Marital status:

Currently married	.6359864	.481155	0	1	.6297338	.6499346
Formerly married	.1234076	.3289062	0	1	.1177532	.1237049
Never married	.240606	.4274537	0	1	.252513	.2263606

These descriptive statistics suggest meaningful differences in demographic characteristics and socio-economic factors between individuals prioritizing the environment and those prioritizing growth. Higher education levels and a greater proportion of never-married individuals are notable among the environment-prioritizing group, whereas those prioritizing growth exhibit a higher representation in the lower education category and among currently married individuals.

RESULTS AND DISCUSSION

REGRESSION ANALYSIS

We presented 3 Models to examine the impact of subjective wellbeing on prioritizing environment in Table 3. The coefficient is presented in the form of odds ratio. The odds ratios (OR) presented in the logistic regression models represent the change in the odds of an individual prioritizing the environment over economic growth (coded as 1) for each unit change

in the independent variables, while holding other variables constant. The odds ratio can be interpreted as the multiplicative change in the odds of the event occurring (i.e., prioritizing the environment) associated with each one-unit increase in the predictor.

For health status, compared to individuals with 'very poor' health (the reference category), individuals with 'poor' health have odds 32.6% higher (OR = 1.326) of prioritizing the environment over growth in Model 1, 28.6% higher in Model 2 (OR = 1.286), and 25.4% higher in Model 3 (OR = 1.254). Individuals with 'fair' health have 41.0% higher odds (OR = 1.410) in Model 1, 31.4% higher (OR = 1.314) in Model 2, and 24.1% higher (OR = 1.241) in Model 3 of prioritizing the environment. Those with 'good' health show 43.2% higher odds (OR = 1.432) in Model 1, 29.5% higher (OR = 1.295) in Model 2, and 20.2% higher (OR = 1.202) in Model 3 of prioritizing the environment. Individuals with 'very good' health have 43.0% higher odds (OR = 1.430) in Model 1, 26.1% higher (OR = 1.261) in Model 2, and 15.0% higher (OR = 1.150) in Model 3 of prioritizing the environment over growth. The odds ratios show a generally decreasing pattern as health status improves, but they remain statistically significant across all models.

Individuals with better health status are more likely to prioritize the environment over growth because they may experience fewer immediate physical or economic concerns, allowing them to focus on long-term issues like environmental sustainability (Brulle & Pellow, 2006; Genchi et al., 2020). Good health often correlates with higher life satisfaction and financial stability, fostering a broader perspective on global challenges. Additionally, healthier individuals might recognize the importance of environmental quality in maintaining well-being, motivating them to advocate for environmental protection (Bahl et al., 2016). This aligns with Maslow's hierarchy, where individuals address higher-order needs, like environmental values, after their basic health and survival needs are met (Desmet & Fokkinga, 2020).

The coefficient of Financial Satisfaction suggest that A one-unit increase in financial satisfaction leads to a 4.2% higher odds of prioritizing the environment over growth (OR = 1.042) in Model 1, and a 1.9% increase in Model 2 (OR = 1.019). This implies that importance given to the environmental conservation is positively correlated with status on financial satisfaction. The results indicate that people with higher levels of financial satisfaction are more likely to focus on sustainability over growth as satisfaction with the current financial situation decreases the pressure stemming from the ongoing economic growth in the form of short-term and self-interests ways of thinking (Antal & Van den Bergh, 2013). Healthy assets enhance prevalence of positive perceptions towards existence rather than things in life enhancing, thus improving on life satisfaction. Moreover, it states that financially satisfied people are less likely to rely on economic growth for individual's well-being and are willing to support those policies that

promote the balance between economic growth and environmental conservation because they probably are able to think about the benefits for the entire society rather than for themselves (Bonyadi et al., 2020).

The estimate of life satisfaction means that one unit of life satisfaction increases the likelihood of prioritizing the environment by 4.7% (OR = 1.047) in Model 3. That means, life satisfaction carries a positive significant impact towards prioritizing the environment. Individuals with high life satisfaction have greater levels of grasping the value of the environmental cause because they are in a better position to worry less and work for the benefit of future generations as well as the overall health of existing organisms as opposed to individual growth (Henderson & Loreau, 2023). Satisfied individuals often value quality of life over material gains and recognize the importance of a healthy environment in maintaining their well-being (Lamb & Steinberger, 2017). This perspective aligns with pro-environmental attitudes, as they are less driven by immediate economic concerns and more motivated to protect natural resources for future generations, reflecting their holistic and forward-thinking outlook (Turaga et al., 2010).

The coefficients of the logistic regression models suggest significant information about the association between demographic covariates and the propensity to choose the environment over growth. This study also indicates that gender is a major factor with females having significantly higher odds of pro environmentalism across all the models tested in this study. More specifically, the odds of a female showing ecological concern are 9.7%, 9.5%, and 9.1% greater than males in Model 1, 2, and 3 respectively. On the other hand, age does not affect prioritization of environments as the odds ratio approximate an intercept of 1.000 in all models. In Model 3, the odds ratio of 0.999 suggests a negligible 0.1% decrease in odds with each additional year of age, which is not statistically significant. Similarly, residential area shows minimal impact, with rural residents having slightly higher odds of prioritizing the environment compared to urban residents (1.0% in Model 1, 0.8% in Model 2, and 0.7% in Model 3), though these differences are not statistically significant. These findings underscore the importance of gender in shaping environmental prioritization, while factors such as age and rural-urban residence appear to play a less significant role.

TABLE 3: ESTIMATES OF THE LOGISTIC REGRESSION MODEL IN ODDS RATIO

VARIABLES	model 1	model 2	model 3
<i>Covariates:</i>			
Female (=1)	1.097*** (0.0153)	1.095*** (0.0153)	1.091*** (0.0153)

Age	1.000 (0.000499)	1.000 (0.000502)	0.999 (0.000503)
Rural (=1)	1.010 (0.0153)	1.008 (0.0153)	1.007 (0.0153)
Currently married (base)			
Formerly married (=1)	0.993 (0.0223)	1.009 (0.0228)	1.013 (0.0229)
Never married (=1)	1.115*** (0.0206)	1.114*** (0.0206)	1.123*** (0.0208)
Lower education (base)			
Middle (=1)	1.133*** (0.0194)	1.125*** (0.0193)	1.125*** (0.0193)
Higher (=1)	1.528*** (0.0273)	1.497*** (0.0269)	1.501*** (0.0270)
Subjective wellbeing indicators:			
Health status:			
Health: very poor (base)			
Health: Poor (=1)	1.326*** (0.0940)	1.286*** (0.0916)	1.254*** (0.0897)
Health: Fair (=1)	1.410*** (0.0923)	1.314*** (0.0866)	1.241*** (0.0823)
Health: Good (=1)	1.432*** (0.0932)	1.295*** (0.0851)	1.202*** (0.0796)
Health: Very good (=1)	1.430*** (0.0944)	1.261*** (0.0843)	1.150** (0.0776)
Financial satisfaction		1.042*** (0.00308)	1.019*** (0.00355)
Life satisfaction			1.047*** (0.00397)
Constant	0.776*** (0.0554)	0.684*** (0.0495)	0.615*** (0.0449)
Observations	88,050	87,729	87,575

seEform in parentheses, *** p<0.01, ** p<0.05, * p<0.1

Formerly Married individuals, compared to individuals who are currently married (the reference category), those who are formerly married (divorced, widowed, or separated) show no statistically significant difference in the likelihood of prioritizing the environment. The odds ratios are close to 1.000 across all models (0.993 in Model 1, 1.009 in Model 2, and 1.013 in Model 3), indicating less than a 1% change in odds, which is not significant. Individuals who have never married exhibit significantly higher odds of prioritizing the environment compared to those who are currently married. Specifically, the odds are 11.5% higher in Model 1 (OR = 1.115), 11.4% higher in Model 2 (OR = 1.114), and 12.3% higher in Model 3 (OR = 1.123). This suggests that marital status plays a significant role, with never-married individuals being more likely to prioritize environmental concerns.

Middle Education individuals, Compared to individuals with lower education (the reference category), those with middle-level education have odds that are consistently higher across all models, with an increase of 13.3% in Model 1 (OR = 1.133) and 12.5% in both Model 2 and Model 3 (OR = 1.125). This indicates that individuals with middle education are significantly more likely to prioritize the environment over growth. Higher Education: Individuals with higher education have substantially greater odds of prioritizing the environment compared to those with lower education. The odds are 52.8% higher in Model 1 (OR = 1.528), 49.7% higher in Model 2 (OR = 1.497), and 50.1% higher in Model 3 (OR = 1.501). This highlights the strong positive association between higher educational attainment and prioritization of the environment.

HETEROGENEITY ANALYSIS

The heterogeneity analysis of the impact of subjective wellbeing on the prioritizing environment is presented in Table 3. The results of the heterogeneity analysis provide insights into how the relationship between health status and the likelihood of prioritizing the environment over growth (coded as 1) varies across the whole sample and by gender (female and male) and residential location (rural and urban). For the whole sample, better health is consistently associated with higher odds of prioritizing the environment. Specifically, individuals with 'poor,' 'fair,' 'good,' and 'very good' health are 25.4%, 24.1%, 20.2%, and 15.0% more likely, respectively, to prioritize the environment compared to those with 'very poor' health. Among females, the relationship is weaker and less consistent, with only 'fair' health showing a significant increase of 19.3% in the odds of prioritizing the environment, while other categories, though positive, are not statistically significant. In contrast, males demonstrate a stronger and more consistent pattern, with individuals having 'poor,' 'fair,' 'good,' and 'very good' health showing 41.2%, 29.9%, 25.6%, and 18.9% higher odds, respectively, of prioritizing the environment compared to those with 'very poor' health.

Residential context further shapes these associations. Among rural residents, the relationship between health and environmental prioritization is weak and statistically insignificant, with minimal increases in odds across health categories. Conversely, urban residents exhibit a consistently strong and significant relationship, with individuals reporting 'poor,' 'fair,' 'good,' and 'very good' health being 29.0%, 32.5%, 30.9%, and 25.0% more likely, respectively, to prioritize the environment compared to those with 'very poor' health. The heterogeneity analysis indicates that health status is a significant predictor of prioritizing the environment for the whole sample, with stronger effects observed among males and urban residents. Among females and rural residents, the relationship is weaker and less consistent. These findings highlight the importance of demographic and contextual factors in shaping the link between health and environmental values.

The heterogeneity analysis highlights how financial satisfaction and life satisfaction influence the likelihood of individuals prioritizing the environment over growth, with variations observed across gender and residential contexts. For the whole sample, the odds ratio of prioritising the environment increases by 1.9% for every unit increase in financial satisfaction. This is in the same light across the gender split with the female percentage rising by 2.0% and the males by 1.9%. Nonetheless, the result shows no such effect in the rural areas with the odd ratio of 0.999 for financial satisfaction; in contrast, in the urban areas, a unit increase of financial satisfaction leads to a stronger and significant 3.1% likelihood of prioritizing the environment.

Life satisfaction exhibits a clearer pattern across different subgroups throughout the analysis. From the analysis, we found that the whole sample revealed that as life satisfaction increased by one unit, the odds of choosing the environment increased by 4.7%. The increase among females is 4.4 percent and among males is 5.0 percent, which points towards slightly higher correlation of job enlargement with male employees. Most notably, on the life satisfaction, one unit increase results in more than five point odds of prioritising the environment in the rural areas in contrast, with urban areas having fewer than four point odds. They indicate that although economic satisfaction is a more important variable in the urban sample, life satisfaction is positively and significantly associated with self-satisfaction for all samples, especially the rural one. In total, it was confirmed that subjective well-being indicators are significant predictors of environmental priorities, with moderation of demographic and contextual factors.

TABLE 4: HETEROGENEITY ANALYSIS

VARIABLES	(1) whole sample	(2) female sample	(3) male sample	(4) rural sample	(5) urban sample
<i>Subjective wellbeing indicators:</i>					
Health status:					
Health: Very poor (base)					
Health: Poor (=1)	1.254*** (0.0897)	1.140 (0.109)	1.412*** (0.153)	1.207 (0.143)	1.290*** (0.116)
Health: Fair (=1)	1.241*** (0.0823)	1.193** (0.106)	1.299*** (0.130)	1.125 (0.124)	1.325*** (0.110)
Health: Good (=1)	1.202*** (0.0796)	1.154 (0.102)	1.256** (0.126)	1.044 (0.115)	1.309*** (0.109)
Health: Very good (=1)	1.150** (0.0776)	1.118 (0.101)	1.189* (0.121)	1.005 (0.112)	1.250*** (0.106)
Financial satisfaction	1.019*** (0.00355)	1.020*** (0.00491)	1.019*** (0.00514)	1.001 (0.00572)	1.031*** (0.00454)
Life satisfaction	1.047*** (0.00397)	1.044*** (0.00550)	1.050*** (0.00575)	1.059*** (0.00648)	1.039*** (0.00504)
Female (=1)	1.091*** (0.0153)			1.088*** (0.0267)	1.092*** (0.0187)
Age	0.999 (0.000503)	0.999 (0.000701)	0.999 (0.000729)	0.999 (0.000914)	1.000 (0.000605)
Rural (=1)	1.007 (0.0153)	1.029 (0.0219)	0.985 (0.0215)		
Currently married (base)					
Formerly married (=1)	1.013	1.008	1.047	0.999	1.026

	(0.0229)	(0.0288)	(0.0402)	(0.0422)	(0.0276)
Never married (=1)	1.123***	1.186***	1.067**	1.063*	1.151***
	(0.0208)	(0.0314)	(0.0282)	(0.0365)	(0.0254)
Lower education (base)					
Middle (=1)	1.125***	1.160***	1.084***	1.062**	1.176***
	(0.0193)	(0.0276)	(0.0269)	(0.0296)	(0.0258)
Higher (=1)	1.501***	1.612***	1.384***	1.358***	1.578***
	(0.0270)	(0.0406)	(0.0358)	(0.0440)	(0.0348)
Constant	0.615***	0.676***	0.615***	0.772**	0.532***
	(0.0449)	(0.0656)	(0.0672)	(0.0933)	(0.0485)
Observations	87,575	45,565	42,010	28,629	58,946

seEform in parentheses, *** p<0.01, ** p<0.05, * p<0.1

Females have been shown to be more environmentally conscious than males, this has also been observed across all age brackets. The analysis of the whole sample indicates that females have 7% odds of prioritizing the environment more than male participants (OR = 1.091), and urban and rural differences are insignificant. Female residents of rural areas have 8.8% higher odds of developing the disease (OR = 1.088) and urban residents have slightly higher odds at 9.2% (OR = 1.092). Such results suggest a strong and significant gender effect on environmental priorities. Meanwhile, age is not a contributing factor, since the odds ratios comparing the different age ranges are close to 1.000 in all models. This means that the age is not significantly associated with the emphasis on the environmental issue in any of the subgroups including the entire participants, the male participants, the female participants, the rural participants and the urban participants.

Marital status shows notable variations. Compared to individuals who are currently married, those who are formerly married do not exhibit a significant difference in environmental prioritization, with odds ratios close to 1.000 across all models. However, individuals who are never married are significantly more likely to prioritize the environment. In the whole sample, never-married individuals are 12.3% more likely to prioritize the environment (OR = 1.123). This effect is more pronounced among females, who exhibit 18.6% higher odds (OR = 1.186), compared to males, who show 6.7% higher odds (OR = 1.067). In terms of residential context, never-married individuals in rural areas have 6.3% higher odds (OR = 1.063), while those in urban areas exhibit a stronger effect with 15.1% higher odds (OR = 1.151).

Education emerges as one of the strongest predictors of environmental prioritization. Compared to individuals with lower education, those with middle-level education in the whole sample are 12.5% more likely to prioritize the environment (OR = 1.125). This effect is particularly strong among females (16.0%, OR = 1.160) and urban residents (17.6%, OR = 1.176), but weaker among males (8.4%, OR = 1.084) and rural residents (6.2%, OR = 1.062). The effect of higher education is even more pronounced. Individuals with higher education are 50.1% more likely to prioritize the environment in the whole sample (OR = 1.501). Among females, this effect increases to 61.2% (OR = 1.612), while among urban residents, the odds are 57.8% higher (OR = 1.578). Males and rural residents show somewhat smaller, though still significant, effects at 38.4% (OR = 1.384) and 35.8% (OR = 1.358), respectively.

CONCLUSION

This research aims to examine the impact of individuals' subjective well-being (SWB) on their likelihood of prioritizing environmental protection or economic growth. SWB is assessed through key indicators, including health status, life satisfaction, and financial satisfaction. The analysis reveals that better health status correlates with higher likelihood of prioritizing the environment, as healthier individuals face fewer immediate concerns and can focus on long-term sustainability. Financial satisfaction also positively impacts environmental prioritization, as financial stability reduces economic pressures, enabling individuals to support policies favoring environmental preservation. Similarly, life satisfaction enhances environmental prioritization, as content individuals prioritize collective and long-term goals, recognizing the importance of a healthy environment for well-being. These findings align with Maslow's hierarchy, suggesting that individuals with fulfilled basic needs are more likely to value environmental sustainability. Secure health, finances, and life satisfaction foster a broader perspective, encouraging pro-environmental attitudes and behaviors that balance personal prosperity with societal benefits. These insights underline the role of well-being in driving environmental stewardship and shaping sustainable development policies.

To promote environmental stewardship and sustainable development, several policy measures can be implemented based on the findings of this research. Enhancing life satisfaction through collective initiatives, like clean neighborhoods and community gardens, can connect personal well-being to sustainability efforts. Improving public health through accessible healthcare and education can enable individuals to focus on long-term environmental goals, while financial stability programs, universal basic income, and financial literacy initiatives can reduce economic pressures, encouraging pro-environmental behaviors. In rural areas, targeted campaigns and improved infrastructure can highlight the local benefits of environmental protection, while urban policies should leverage the stronger relationship between financial

satisfaction and sustainability by promoting green infrastructure and resource-efficient practices. Educational campaigns linking subjective well-being to environmental protection and targeted interventions addressing urban-rural and gender disparities can further maximize the impact of these policies, fostering a balanced approach to personal prosperity and environmental preservation.

REFERENCES

- Ahmed, J. & Alvi, A. A. (2024). Balancing Economic Growth and Environmental Sustainability in Developing Countries: The Role of Financial Innovation. *Journal of Energy and Environmental Policy Options*, 7(4), 9-19.
- Antal, M., & Van den Bergh, J. C. (2013). Macroeconomics, financial crisis and the environment: Strategies for a sustainability transition. *Environmental Innovation and Societal Transitions*, 6, 47-66.
- Arnocky, S., & Stroink, M. (2010). Gender differences in environmentalism: The mediating role of emotional empathy. *Current Research in Social Psychology*, 16(9), 1-14.
- Audi, M. (2024). Exploring Fiscal Dynamics Between Resource and Non-Resource Tax Revenues in Oil-Dependent Countries. *Journal of Energy and Environmental Policy Options*, 7(4), 20-30.
- Bahl, S., Milne, G. R., Ross, S. M., Mick, D. G., Grier, S. A., Chugani, S. K., ... & Boesen-Mariani, S. (2016). Mindfulness: Its transformative potential for consumer, societal, and environmental well-being. *Journal of Public Policy & Marketing*, 35(2), 198-210.
- Barrett, C. B. (2005). "The impact of health on economic growth: A review of the literature." *The Journal of Economic Literature*, 43(3), 523-537.
- Bonyadi, N., Asghari, H., & Kiaei, M. (2020). Identification and prioritization of employee satisfaction strategies in tehran regional water company using analytic hierarchy process (AHP). *Tehnički glasnik*, 14(3), 251-256.
- Bulle, R. J., & Pellow, D. N. (2006). Environmental justice: human health and environmental inequalities. *Annual review of public health*, 27(1), 103-124.
- Čábelková, I., Smutka, L., Mareš, D., Ortikov, A., & Kontsevaya, S. (2023). Environmental protection or economic growth? The effects of preferences for individual freedoms. *Frontiers in Environmental Science*, 11(1), 1-15.
- Cameron, S. (2012). "Financial satisfaction and its relationship with financial behavior." *Journal of Consumer Research*, 42(6), 907-919.
- Cassen, R. H. (1987). Our common future: report of the World Commission on Environment and Development. *International Affairs*, 64(1), 126.

- Combes, J. L., Hamit-Hagggar, M., & Schwartz, S. (2018). A multilevel analysis of the determinants of willingness to pay to prevent environmental pollution across countries. *The Social Science Journal*, 55(3), 284-299.
- Desmet, P., & Fokkinga, S. (2020). Beyond Maslow's pyramid: Introducing a typology of thirteen fundamental needs for human-centered design. *Multimodal technologies and interaction*, 4(3), 38.
- Diener, E. (1984). Subjective well-being. *Psychological Bulletin*, 95(3), 542-575.
- Gan, C., Wee, H. Y., Ozanne, L., & Kao, T. H. (2008). Consumers' purchasing behavior towards green products in New Zealand. *Innovative Marketing*, 4(1), 93-102.
- Gelissen, J. (2007). Explaining popular support for environmental protection: A multilevel analysis of 50 nations. *Environment and Behavior*, 39(3), 392-415.
- Genchi, G., Carocci, A., Lauria, G., Sinicropi, M. S., & Catalano, A. (2020). Nickel: Human health and environmental toxicology. *International journal of environmental research and public health*, 17(3), 679.
- Givens, J. E., & Jorgenson, A. K. (2011). The effects of affluence, economic development, and environmental degradation on environmental concern: A multilevel analysis. *Organization & Environment*, 24(1), 74-91.
- Gugushvili, D. (2021). Public attitudes toward economic growth versus environmental sustainability dilemma: Evidence from Europe. *International Journal of Comparative Sociology*, 62(3), 224-240.
- Henderson, K., & Loreau, M. (2023). A model of Sustainable Development Goals: Challenges and opportunities in promoting human well-being and environmental sustainability. *Ecological Modelling*, 475, 110164.
- Israel, D., & Levinson, A. (2004). Willingness to pay for environmental quality: Testable empirical implications of the growth and environment literature. *Contributions in Economic Analysis & Policy*, 3(1), 1-29.
- Jones, R. E., & Dunlap, R. E. (1992). The social bases of environmental concern: Have they changed over time? 1. *Rural Sociology*, 57(1), 28-47.
- Kemmelmeier, M., Król, G., & Kim, Y. H. (2002). Values, economics, and proenvironmental attitudes in 22 societies. *Cross-cultural Research*, 36(3), 256-285.
- Lamb, W. F., & Steinberger, J. K. (2017). Human well-being and climate change mitigation. *Wiley Interdisciplinary Reviews: Climate Change*, 8(6), e485.
- Lengfeld, H., & Gerhards, J. (2008). Support for European Union environmental policy by citizens of EU-member and accession states. *Comparative Sociology*, 7(2), 215-241.

- López de Calle Bastida, N. (2023). Prioritizing the environment or economic growth: Insights from the World Values Survey. *Facultad de Ciencias Económicas Empresariales*, 1(1), 1-37.
- Nguyen, H. V., Le, M. T. T., Pham, C. H., & Cox, S. S. (2024). Happiness and pro-environmental consumption behaviors. *Journal of Economics and Development*, 26(1), 36-49.
- Nili, A. & Asadi, Y. (2024). Temporal Dynamics of Oil Demand Elasticities in OECD Economies. *Journal of Energy and Environmental Policy Options*, 7(4), 31-41.
- Olli, E., Grendstad, G., & Wollebaek, D. (2001). Correlates of environmental behaviors: Bringing back social context. *Environment and Behavior*, 33(2), 181-208.
- Shair, W., Tayyab, M., Nawaz, S., & Amjad, K. (2023). Digital divide in Pakistan: Barriers to ICT adoption. *Bulletin of Business and Economics (BBE)*, 12(2), 243-252.
- Shair, W., Waheed, A., Kamran, M. M., & Kubra, N. (2022). Digital Divide in Pakistan: Barriers to ICT usage among the individuals of Pakistan. *Journal of Economic Impact*, 4(3), 196-204.
- Steel, B. S. (1996). Thinking globally and acting locally? Environmental attitudes, behavior and activism. *Journal of Environmental Management*, 47(1), 27-36.
- Sulehri, F. A., & Ali, A. (2024). Nexus among Regulatory Framework, Economic Growth and Sustainable Development: Insights from Structural Equation Modeling Approach. *Bulletin of Business and Economics (BBE)*, 13(1).
- Sulehri, F. A., Ali, A., & Alam, M. (2024). Assessing the Pathways of Sustainable Development: A Structural Equation Modeling Investigation of Regulatory Framework, Innovation and Economic Indicators. *Journal of Asian Development Studies*, 13(1), 970-984.
- Sulehri, F. A., Ali, A., & Alam, M. (2024). Country Risk and Sustainable Development: Mediating Role of Economic Growth. *Journal of policy research*, 10(1), 54-61.
- Sulemana, I. (2016). Are happier people more willing to make income sacrifices to protect the environment? *Social Indicators Research*, 127(1), 447-467.
- Sulemana, I., James Jr, H. S., & Valdivia, C. B. (2016). Perceived socioeconomic status as a predictor of environmental concern in African and developed countries. *Journal of Environmental Psychology*, 46(1), 83-95.
- Torgler, B., & Garcia-Valiñas, M. A. (2007). The determinants of individuals' attitudes towards preventing environmental damage. *Ecological Economics*, 63(2-3), 536-552.
- Tranter, B. (2011). Political divisions over climate change and environmental issues in Australia. *Environmental Politics*, 20(1), 78-96.
- Tranter, B. (2013). The great divide: Political candidate and voter polarization over global warming in Australia. *Australian Journal of Politics & History*, 59(3), 397-413.

- Turaga, R. M. R., Howarth, R. B., & Borsuk, M. E. (2010). Pro-environmental behavior: Rational choice meets moral motivation. *Annals of the New York Academy of Sciences*, 1185(1), 211-224.
- Wang, E., & Kang, N. (2019). Does life satisfaction matter for pro-environmental behavior? Empirical evidence from China General Social Survey. *Quality & Quantity*, 53(1), 449-469.
- Welsch, H., & Kühling, J. (2010). Pro-environmental behavior and rational consumer choice: Evidence from surveys of life satisfaction. *Journal of Economic Psychology*, 31(3), 405-420.
- World Values Survey. (n.d.). Online Data Analysis. Retrieved from World Values Survey.
- Xu, J., & Li, J. (2018). The tradeoff between growth and environment: Evidence from China and the United States. *Problemy Ekorozwoju*, 13(1), 15-20.
- Yan, S. & Sriboonchitta, S. (2024). Governance, Renewable Energy, and Urbanization: Drivers of Environmental Outcomes in Asia. *Journal of Energy and Environmental Policy Options*, 7(4), 42-51.
- Yasmeen, R., Tao, R., Shah, W. U. H., & Shair, W. (2024). Repercussions of environmental policy stringency on carbon, energy and non-energy productivity in highly emerging economies: perspective of green growth. *Environmental Science and Pollution Research*, 31(3), 4500-4517.
- Zelezny, L. C., Chua, P. P., & Aldrich, C. (2000). Elaborating on gender differences in environmentalism. Special Issue: Promoting environmentalism. *Journal of Social Issues*, 56(3), 443-457. Elaborating on Gender Differences in Environmentalism: Community-Based Social Marketing: Doug McKenzie-Mohr (cbsm.com)
- Zenios, A. (2024). Financial Globalization, Environmental Degradation, and Energy Consumption in ASEAN: An Empirical Analysis. *Journal of Energy and Environmental Policy Options*, 7(4), 1-8.