

## Religiosity and Quality of Life and Well-being in districts of Khyber Pakhtunkhwa, Pakistan

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### ABSTRACT

#### Keywords:

Quality of Life, Wellbeing,  
Religiosity, Life Domains

Quality of life describes life conditions of the inhabitants of a nation or region which is an outcome of the environment that they dwell in. This study examines Quality of life (QoL) & Well-being in relation to religiosity in the province of Khyber Pakhtunkhwa, Pakistan. Primary data from thirteen districts of Khyber Pakhtunkhwa was analyzed, selecting a sample of 500 households from thirteen of the twenty-five districts in the province proportional to their population size. The relationship between religiosity and the life domains was calculated through population correlation coefficient ( $r$ ), where results reveal a positive relation to all but a few domains of life. The negative relation is with the material life conditions, involvement with governance and the built and natural environment. The relation between domains of life and its quality is arrived at through applying a multivariate regression technique. Most domains affect quality of life positively. It is suggested that religiosity plays a significant role in the quality of life of citizens and would be pertinent to promote its encouragement and practice in the social setup.

### INTRODUCTION

Today's world and consequently today's economies need a broader insight into the well-being of its citizens. Economists cannot ignore and have been recently incorporating Quality of life and citizens' self-perceived well-being, as an important economic outcome (Brown & Tierney, 2006). Utility can be measured reliably in terms of subjective well-being (Frey and Stutzer, 2002) and such data are being embraced by economists. The part that religiosity plays in well-being has also been examined more closely, for instance, faith communities are those belonging to groups based on religious inclinations etc. find ample support for their followers (Durkheim, 1947; Ellison, Gay and Glass 1989), their ability to face vulnerable situations, like, bereavement, divorce, illness, unemployment through active involvement in spiritual practices can also affect subjective wellbeing (Ellison, 1991). Generally, people experiencing happiness are those who state their religion has a vital influence in their lives (Gallup, 1984). This has been further reiterated by researchers like Inglehart (1990), Ellison (1993), Swinyard, Kau, and Phua (2001), Ferriss

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(2002), Soydemir, Batisda, and Gonzalez (2004, and Lelkes (2006) who have shown in different setups how religious participation has a strong direct link with self-perceived wellbeing.

In the context of Pakistan, which is a Muslim majority country that came into existence as a result of, among others, the Pakistan Movement which saw Hindus and Muslims as distinct civilizations that could not evolve into a single national culture (BRASS 19974 as sighted in Talha 2000). Religion though was not regarded by its founder Jinnah to be the Basis or ideology on which the nation state was born (Paracha 2013). However, in the later years various rulers for political gains used religion as their modus operandi for coming to and staying in power (Paracha 2013). In Pakistan, Islam in the past few decades have continued to be used as a slogan by politicians and has attained strength as a way of life from extreme to moderate by majority Muslims.

Quality of life covers not only the material aspects of life but a large array of factors that are held precious to living (Stiglitz, Sen, Fitoussi 2009) Well-being is taken as an integral part of a person's own evaluation of his objective circumstances and in fact also depends upon the socio-political and economic set up and the culture that he is a part of (Rojas, 2004). A Quality of Life evaluation is subjective and is part of the culture, society and surroundings in which it takes place. Quality of Life, (QoL), is considered at times as a person's own perception of his wellness (Campbell, 1981).

Here for the purpose of the study the Quality of Life & Wellbeing is represented into a multi-faceted phenomenon covering different domains of life like material living conditions, health, education, work and work conditions, inter-personal relations and social cohesion, personal security, external environment, governance and basic rights, and overall experience of life (as in Erorostat survey 2007, Alam and Amin 2016). High scores regarding quality of life are significantly higher in patients having high religiosity and low in patients having moderate religiosity ( $P < 0.0001$ ). Moreover, a direct correlation was found between religiosity and QoL ( $P < 0.0001$ ) (Zargani, A., et al; 2018).

Religion has always been a major forerunner of civilizations across the world history. More recently there has been a revival of religious thought and interest in aspects of religiosity as for instance in psychological literature. Religiosity is belief in an omnipotent presence which through expression of emotion and behavior is embodied in religious rituals. (Dedert, Studts, Weissbecker, Salmon, Banis and Stepthon, 2004, as cited in Sutantoputi & Watt, 2013). The present research will look at religiosity through the extent and frequency of involvement in religious practices by the people, and the role religiosity albeit extrinsic, that it plays in their quality of life and wellbeing.

The focus of this study is to examine how religious and spiritual constructs in this case frequency of attending religious services and their measurement are related to the quality of life and its subjective appraisal in terms of well-being.

The question asked is: To what extent does religious involvement contribute to perceived increases in overall experience of life in terms of Quality of Life and Well-being?

This perspective helps us to understand how religiosity and spirituality becomes involved into motivating the individual in an effort to create a sense of well-being and happiness in their lives (Piedmont & Friedman, in Land et al.(eds) 2012). Allport, (1950, 1959) also point to the difference between intrinsic religiosity as that of inward depth of feeling and extrinsic religiosity as that meaning only outward show of religious activity, both being two distinct parallel behaviours. For the purposes of the study at hand these dimensions will be regarded similar (e.g., Zinnbauer et.al. 1999).

## **LITERATURE REVIEW**

The Quality of life refers to the way people experience their lives whether it is in a country or region and how that is influenced by different factors which could wither be endogenous or exogenous (Cummins, 1996; Hagerty et al., 2001; Veenhoven 2000). Religiosity is believing in God which is expressed through chaste and holy behavior (Jamal & Zahra, 2014). The testing of relationship between religious beliefs and participation in religious activities and Quality of Life show that happiness is closely associated with frequency in religious attendance so are other influences which can also be taken to be responsible; religion usually attracts people with happier dispositions, giving a meaningful existence which can itself inculcate well-being (Ferriss, 2002). This relationship can bring about a better comprehension of the part that religiosity can play in an individual's attempt at happiness and wellbeing in his life (Piedmont & Friedman, in Land et al. (eds) 2012). People who regard themselves as happy do also think of themselves as religious and staunch in their beliefs (Khalek & Lester, 2009). Religious persons report higher subjective well-being (Khalek, (2011), and report a more positively satisfied life associated with religious rituals (Jamal& Zahra, 2014). Religiosity could be an important factor adding to health related Quality of Life as well, suggesting that religious beliefs and practices could have the potential of being incorporated in psychotherapeutic practices among patients (Khalek, 2011). Gull and Daud (2013), Wong, Rew and Salaikeu, (2006) reported the effects of religiosity on mental health of adults showing that this relationship is much stronger for male and older adolescents than for female and younger adolescents. There is significant and positive correlation to be found among religiosity, health and well-being (Baroun, 2006). This has been further reiterated by researchers like Inglehart (1990), Ellison (1993), Swinyard, Kau, and Phua (2001), Ferriss (2002), Soydemir, Batisda, and Gonzalez (2004) and Lelkes (2006) who have shown in different set ups how religious participation is greatly linked with subjective wellbeing. Zargani, A., et al; (2018) assessed the

association relationship between religiosity and quality of life (QoL). Data was analysed by applying Chi-square tests, Pearson's correlation, and an independent sample *t*-test. Results showed that majority 69% had high religiosity (69%) and moderate QoL (46.5%) score. Results showed high scores regarding quality of life are significantly higher in patients having high religiosity and low in patients having moderate religiosity ( $P < 0.0001$ ). Moreover, a direct correlation was found between religiosity and QoL ( $P < 0.0001$ ).

### **Research Gap**

This research attempts to examine a relation between QoL & Well-being and religiosity in the province of KP (Khyber Pakhtunkhwa). This is the first ever study in this field. No work has been conducted so far to study the relation between religiosity and quality of life. The studies conducted internationally are mostly qualitative and descriptive in nature. However, this study focuses on the quantitative methodology. The quantitative measurement of the relationship will give us a better understanding into the part religiosity and its practice plays in having an impact on the way people experience their lives and perhaps attain more fulfilled and satisfied outcomes.

### **RESEARCH METHODOLOGY**

The research in the Quality of Life (QoL) and Well-being has multidisciplinary roots. In the context of a Muslim society, religion affects all the aspects of life whether economic, social, political or international. QoL is a multifaceted construct which is an outcome of the assessment of numerous human needs at all levels be it personal, society, country or international (Costanza, 2008). A large body of research has contributed into constructing indices which take a number of indicators together to represent a certain phenomenon pertaining to social and economic well-being. A careful selection of life domains keeping in mind the requirements of the present study, multi-dimensionality of life itself as well as earlier research in domains of life (Hagerty et al., 2001). The present study measures the effects of religiosity on the life quality and well-being of people in a Muslim dominated society of Khyber Pakhtunkhwa in Northern Pakistan. Adherents of the Islamic faith firmly believe that their religion offers a complete code of life and specifies the rules of living. In the present study the idea is to attain a comprehensive representation of QoL. In order to achieve that various domains of life have been focused upon; for instance, 1) the economic domain including the material aspects of life, 2) the domain for work life, 3) having access to health facilities, 4) education access and level 5) social cohesion levels, 6) Being physically safe, 7) participating in civil and political circles 8) being part of the built and natural environment. (as in Alam and Amin (2016), Eurostat Survey of QoL 2007).

## Research Area of the Study

The present study focuses on the province of Khyber Pakhtunkhwa, Pakistan where a total of 13 districts were selected based on population figures i.e larger districts in terms of population were selected. This sample area covers almost 75% of the total area of the province of Khyber Pakhtunkhwa, making it a representative sample (Bureau of statistics Islamabad 2011-12) (as in case of Alam and Amin 2016).

## Sample size

A sample of 500 households from the selected districts was arrived at using Yamane's equation. Based on the Eurostat Survey Questionnaire 2007 an appropriate questionnaire was developed and administered in the thirteen districts. Each district was allotted a sample size through proportional allocation method. (as in case of Alam and Amin 2016).

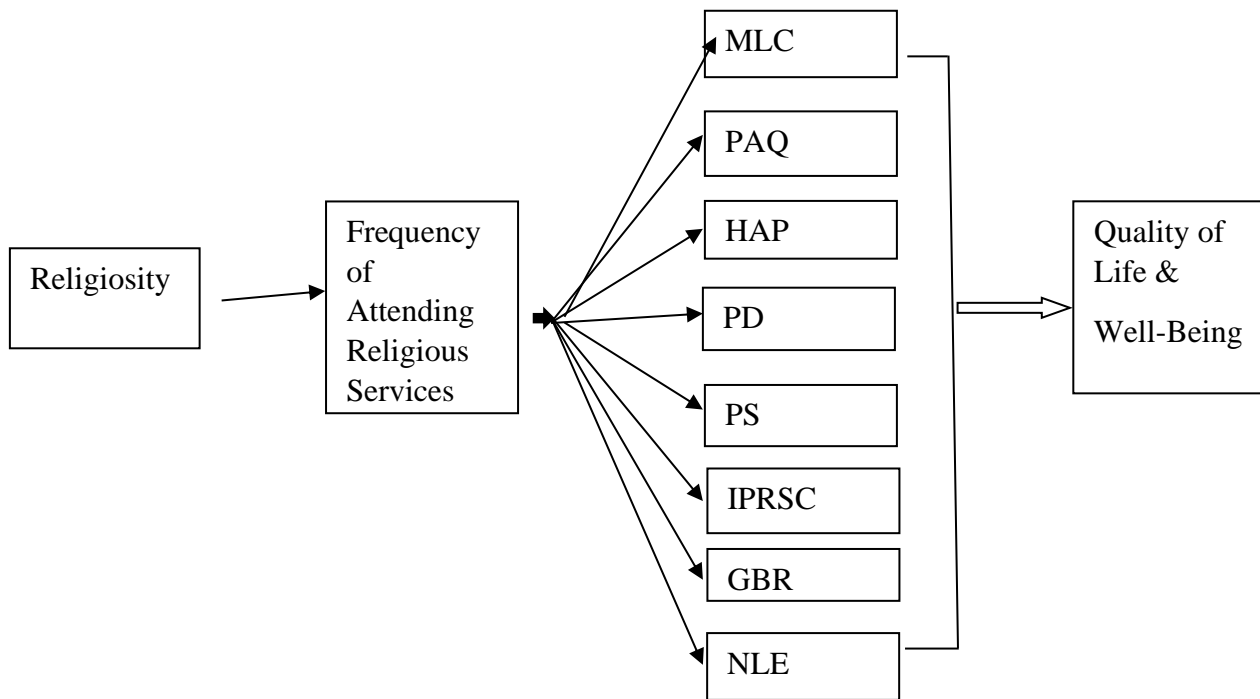
**Table 1: District Wise Distribution of Sample Size**

District	Sampling Population Size(000)	Sample size	District	Sampling Population size(000)	Sample size
Peshawar	3276	83	Nowshehra	1299	33
Mardan	2201	56	Lower Dir	1143	29
Swat	1989	50	Abbottabad	1130	28
Mansehra	1600	40	Bannu	991	25
Sawabi	1537	39	Haripur	934	24
Charsadda	1514	38	Kohat	855	22
DIK	1329	33	Total		500

*Source: Alam and Amin (2016)*

## Theoretical Framework

In order to assess the relation between the two, the correlation between how frequently the respondents participate in religious activities and their QoL and Well-being can be used as an assessment method (as in George et al. 2002). The theoretical framework is developed as follows;



### **Econometric Model**

The econometric models based on theoretical framework can be developed as;

$$QoL = \beta_0 + \beta_1MLC + \beta_2PAQ + \beta_3HAP + \beta_4PD + \beta_5PS + \beta_6IPRSC + \beta_7GBR + \beta_8NLE + \beta_9Ril + \mu$$

Where;

QoL = Quality of life

MLC = Material Living condition

HAP = Health Access and Practice

PD = Personal Development

PS = Personal Security

IPRSC = Interpersonal Social Cohesion

NLE = Natural Living Environment

### **Data Analytical Techniques**

A large number of indicators were inserted to represent various domains of life which were later reduced through Principal Component Analysis (PCA) without compromising on information in the data (Alam and Amin (2016), Haq, Ahmed and Shafique (2010), Ghaus, Pasha and Ghaus 1996). Pearson Correlation Coefficient (r) is estimated to analyze the impact of religiosity on the life domains. Multivariate Regression

Analysis for QoL and well-being is carried using variables in selected domains of life (as in Alam and Amin (2016) and Eurostat Quality of Life survey 2007).

## **FINDINGS & DISCUSSION**

The analysis of the data is carried out in two ways. First, the correlation coefficient is calculated between religiosity as represented by frequency of attending religious practices and the QoL domains. Second, overall life experience affected by different life domains is quantified using multivariate regression analysis

### **Correlation between Religiosity and QoL Domains**

Population correlation coefficient ( $r$ ) is calculated. The results are given in the table below;

There exists a strong correlation between the life domains and the religiosity. The material living conditions, Governance and Basic rights and natural and living environment domains are negatively correlated to religiosity.

**Table 1. Correlation Between Life Domains and Religiosity**

Factors		MLC	PAQ	HAP	PD	PS	GBR	IPRSC	NLE	Frequency of Religious Activity
MLC	Pearson Correlation	1	-.065	-.062	-.004	.042	.047	.018	-.063	-.148**
	Sig.		.149	.165	.925	.351	.298	.686	.159	.001
PAQ	Pearson Correlation	-.065	1	.011	-.199**	-.004	.037	.017	-.116**	.106*
	Sig.	.149		.808	.490	.927	.406	.710	.209	.018
HAP	Pearson Correlation	-.062	.011	1	.104*	.269**	.015	.082	.254**	.313**
	Sig.	.165	.808		.120	.310	.736	.068	.213	.000
PD	Pearson Correlation	-.004	-.199**	.104*	1	.157**	-.116**	-.016	.053	.080
	Sig.	.925	.345	.120		.260	.109	.715	.239	.073
PS	Pearson Correlation	.042	-.004	.269**	.157**	1	.001	-.039	.003	.013
	Sig.	.351	.927	.310	.310		.975	.386	.947	.008
GBR	Pearson Correlation	.047	.037	.015	-.116**	.001	1	-.014	.088*	-.160**
	Sig.	.298	.406	.736	.109	.975		.759	.050	.000
IPRSC	Pearson Correlation	.018	.017	.082	-.016	-.039	-.014	1	.086	.148**
	Sig.	.686	.710	.068	.715	.386	.759		.054	.001
NLE	Pearson Correlation	-.063	-.116**	.254**	.053	.003	.088*	.086	1	-.246**
	Sig.	.159	.209	.213	.239	.947	.050	.054		.000
FRA	Pearson Correlation	-.148**	.106*	.313**	.080	.013	-.160**	.148**	-.246**	1
	Sig.	.001	.018	.000	.073	.768	.000	.001	.000	

[\*\*]. Correlation is significant at the 0.01 level (2-tailed).

\*. Correlation is significant at the 0.05 level (2-tailed).

There has always been a trend towards the negation of amassing material positions and wealth as a more religious way throughout the ages, which could be a reason for negative correlation. Similarly, the more religious people are less participatory in political activities. Similar is the case of natural living environment.

### Impact of Life Domains on Quality of life



Multivariate regression analysis is used to measure this impact. For this purpose, SPSS 16 is used. The results for all the thirteen districts are given below.

**Table 2.A. Impact of Life Domains on Quality Of Life**

Variable	Abbotabad	Bannu	Charsadda	D.I.Khan	Haripur	Kohat
MLC	0.405 (7.78)***	0.198 (8.250)***	0.207 (12.937)***	0.494 (1.832)*	1.925 (7.156)***	0.683 (1.902)*
PAQ	0.211 (4.05)***	-0.010 (-.035)	0.231 (1.911)*	0.404 (13.466)***	-0.582 (-1.118)	-0.584 (-1.643)
HAP	-0.188 (-1.12)	0.221 (3.298)**	0.033 (.236)	-0.068 (-.313)	0.001 (.002)	0.433 (14.931)***
PD	0.215 (3.06)***	0.147 (4.083)***	0.133 (1.804)*	0.325 (3.421)***	0.396 (10.703)***	0.156 (2.229)**
PS	0.111 (2.77)**	0.335 (4.785)***	0.280 (2.456)*	0.328 (2.620)**	0.181 (2.784)***	-0.168 (-1.197)
GBR	-0.081 (-.63)	-0.051 (-.223)	-0.016 (-.113)	-0.242 (-1.615)	0.218 (2.158)*	-0.273 (-.998)
IPRSC	0.222 (3.41)**	-0.022 (-.070)	-0.224 (-.987)	-0.190 (-.684)	0.401 (3.260)**	0.956 (2.030)*
NLE	-1.171 (-3.63)**	-0.154 (-.727)	-0.142 (-.539)	0.325 (2.778)**	-0.600 (-.424)	0.325 (4.514)***
R <sup>2</sup>	0.729	0.266	0.427	0.583	0.468	0.586
Adj R <sup>2</sup>	0.614	-0.100	0.269	0.444	0.185	0.331
S.E of estimate	0.24418	0.39601	0.23653	0.32885	0.50791	0.32654
F-Statistic	6.380	0.727	2.702	4.195	1.652	2.299
Sig F	0.000	0.667	0.024	0.003	0.192	0.088
D.W	1.784	1.913	2.118	2.199	1.961	1.727

**Table 3. Impact Of Life Domains on Quality of Life**

Variable	Lower Dir	Mansehra	Mardan	Nowshera	Peshawar	Swabi	Swat
MLC	0.333 (3.872)**	0.195 (10.263)***	0.082 (16.400)***	0.260 (5.652)***	0.456 (3.081)*	0.703 (3.480)***	0.241 (7.08)***
PAQ	-0.008 (-.034)	-0.167 (-.811)	0.441 (2.845)**	0.273 (2.084)*	0.149 (1.474)	0.033 (.237)	0.289 (2.03)**
HAP	.185 (2.890)**	0.075 (.360)	0.371 (3.198)**	0.070 (.639)	0.139 (1.260)	0.365 (2.249)**	0.190 (2.74)**
PD	0.313 (4.347)***	0.338 (3.325)***	0.038 (.728)	0.231 (2.962)***	0.179 (3.001)**	0.020 (.283)	0.273 (3.413)***
PS	0.116 (2.100)*	0.309 (3.037)***	-0.033 (-.540)	0.455 (4.964)***	0.171 (3.167)**	0.207 (2.250)**	-0.020 (-.194)
GBR	0.004 (.022)	-0.167 (-1.436)	-0.174 (-2.311)**	0.327 (2.946)**	-0.161 (-2.17)**	-0.179 (-1.425)	-0.078 (-.600)
IPRSC	0.160 (2.352)**	0.388 (12.516)***	0.521 (3.646)***	0.426 (1.905)*	0.035 (.320)	-0.145 (-.812)	0.244 (3.935)**
NLE	-0.307 (-1.294)	-0.071 (-.383)	0.324 (3.899)***	-0.045 (-.171)	0.188 (1.880)*	-0.008 (-.045)	0.036 (.215)
R <sup>2</sup>	0.579	0.516	0.495	0.821	0.330	0.324	0.201
Adj R <sup>2</sup>	0.158	0.387	0.409	0.755	0.258	0.144	0.045
S.E of estimate	0.33739	0.37611	0.25747	0.20327	0.33533	0.25001	0.36186
F-Statistic	1.375	3.996	5.765	12.586	4.557	1.800	1.286
Sig F	0.332	0.003	0.000	0.000	0.000	0.116	0.277
D.W	1.825	1.754	1.919	2.153	1.835	1.902	1.737

\* Significant at 0.10 levels of significance  
\*\* Significant at 0.05 levels of significance  
\*\*\* Significant at 0.01 levels of significance

Figures in Parenthesis are estimated t-values

Looking at the results, Material Living Conditions (MLC) is positively related to Quality of Life (QoL) in all the districts of Khyber Pakhtunkhwa. The coefficient is significant for all the thirteen districts. (This means that the more a person or a family is religious, he is more satisfied with the material conditions of his life and he is having more satisfaction from the life. So high is his quality of life. Productive Activity and Quality (PAQ) is positively related to QoL in majority of the districts. In five districts (Bannu, Haripur, Kohat, Lower Dir and Manshera) the Productive Activity and Quality is negatively related. However, in all these five districts, the coefficient is not significant. Those indulging in religious activities are seen to be more prone to work life and its quality and hence enhances a positive relation with the quality of life. Health Access and Perception has an inverse relation to QoL in Abbotabad and D. I. Khan while in the rest of the eleven districts it is positively related to quality of life. However, in both districts Abbotabad and D. I. Khan the coefficient is not significant. Religiosity and health as well as Personal Development (PD) is positively related to QoL in all the districts of Khyber Pakhtunkhwa. The religious views on education for both male and female are clear but custom and culture still finds its way in keeping girls and women out of schools etc., but male enrollment in education is on the rise where it is more a call of the economic gains to be had from an educated individual rather than the religious obligations. While in the female case, the informed civil society and international pressures (MDGs) focus is driving the government to persuade communities and make available facilities for female education. The coefficient of Personal Development is significant in almost all the districts with some exemptions. Personal Safety (PS) has a positive relation with QoL in ten districts of the province. Only three districts show negative relation between them. The coefficients are also significant at 1 percent levels of significance for all the districts. However, the districts (Mardan, Swat, and Kohat) where the relation is negative, the coefficients are insignificant. Due to war on terror and the terrorist attacks in different areas of the province, people now prefer safety over other economic and non-economic incentives. Religiosity among inhabitants serves as a strong safety mechanism against the threat of terrorist attacks. Areas where people are practicing religiosity are more satisfied with their personal safety and hence positively affect their quality of life. Religious gatherings offer commonality, catching up with friends, socializing and sharing similar experience which gives way to a more socially cohesive existence. Healthy social relationships, strong community ties, maintaining brotherhood and taking part in the activities for social welfare has positive and significant impact on the inhabitants' quality of life. All these are inherent in the teachings of the Muslim faith which the inhabitants adhere to. The results of the study are in line with the results of Khalik, (2011), Baroun, (2006), Inglehart

(1990), Ellison (1993), Swinyard, Kau, and Phua (2001), Ferriss (2002), Soydemir, Batisda, and Gonzalez (2004) and Lelkes (2006)

## CONCLUSIONS

The present study looked at the relationship between Quality of life & Well-being and Religiosity among the inhabitants of different districts of Khyber Pakhtunkhwa in northern Pakistan. Primary data from 500 selected households was collected through questionnaire from thirteen districts of Khyber Pakhtunkhwa. The relation between Religiosity and the life domains was calculated through population correlation coefficient ( $r$ ). The results show that religion is negatively related to material living conditions, governance, and natural environment, while it is positively related to personal development, personal safety, social cohesion, productive activity and health access. The impact of life domains on quality of life (QoL) is estimated by using multivariate regression analysis. The results show that material living condition, productive activity, personal development, personal safety, and social cohesion affects the quality of life positively while the domains of governance and basic rights and natural environment affects the quality of life negatively. Religiosity plays an important role in our life quality as it touches all major aspects of our lives, and hence an attempt to encourage collective religious practices/services is recommended.

### Limitations of the Study

The study has some limitations. Being based on correlation statistics it is not possible to describe causal connections between the variables. Therefore, prospective longitudinal studies may be carried. Secondly, the study has considered limited aspects of religiosity and therefore the true level of religiosity may be misrepresented.

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