Multi-Dimensional Index of Quality of Life:  
The Pakistan Case

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Abstract

Quality of Life in Pakistan is an understudied and rather unexplored domain. With various definitions and challenges to explaining quality of life, a public opinion poll and scientific surveys have been conducted in order to find out more about the quality of life in Pakistan. Using a nationally representative sample, this paper seeks to identify quality of life measures, find results, and analyze them to see what they mean, specifically in the context of Pakistan.

Keywords: Pakistan, Gallup, quality of life, public opinion, Net Satisfaction Index

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Across literature, there exists no real consensus regarding how quality of life can be measured or defined. According to most theoretical debates, there are two major technical problems faced in determining or evaluating quality of life. The first one is obviously the identification of elements or dimensions that allude to the quality of life. The second is about how much importance is to be attached to each of those dimensions in measuring the quality of life of a certain population accurately (Findlay, Rogerson, & Morris, 1988).

In fact, quality of life has different definitions for different groups of people and carries different meanings in different disciplines. Some would say that quality of life is a philosophical concept – one that is hard to quantify. Similar groups would argue that measuring quality of life on a preference-satisfaction scale has been overdone and that it is relied on too heavily. Though there is some truth to the fact that there is an overdependence on this measure of quality of life, its uncontroversial nature and high plausibility means that there is little problem in using this system so frequently (Sandøe, 1999). But how does preference theory quantify or qualify the quality of life? In this theory, the person’s quality of life is defined through their preference and satisfaction – with a good life being one in which a person gets what he wants. This theory is not without its own shortcomings, the biggest of which is possibly the fact that one cannot simply weight the preferences of a person accurately. A preference theory, although it looks like the best option, is still difficult to put into practice.

Parmenter (1994) argues that the term quality of life has been present in the field of medicine for a very long time, even if its scientific use is relatively new. He also argues that definitions of quality of life range from one-dimensional to multi-dimensional (something which this paper very clearly follows), where the range of approaches do have commonalities and differences amongst them. In its measurable definition, quality of life does not have a clear cut definition, and the factors and dimensions may vary from population to population, and region to region.

Beckie and Hayduk (1997) in “Measuring Quality of life,” seek to weave through the conceptual entanglements that exist with measuring the quality of life. With this, they ended up with a number of findings. One was that health related quality of life was deemed as a separate concept in which other factors were barely considered or considered too broad. However, they also view this as one very important dimension,
through which a one-dimensional view of the quality of life could be taken. That is one recommended approach. The other is to place multiple indicators of the putative unidimensional identity (Quality of Life) in a causal model containing likely causes and effects of the quality of life. However, what they do agree on is that if the measures for quality of life are unidimensional, they can be made into a global measure.

There are obviously some very pertinent issues related to measuring quality of life. One of these is global versus domain specific measures. In the study conducted, seven indicators have been used to measure the quality of life, specifically with the Pakistani case, and more broadly within the framework of other countries doing such research in Asia. The second very important issue to keep in mind is the stability of measures over time. It is widely believed that certain measures would be different when taken at different times depending on the amount of stress at a certain time in a respondent’s life. This being an arbitrary and subjective matter, is hard to determine and even harder to quantify (Evans, 1994). It is also agreed upon by scholars that, although measures of quality of life seem to have a high correlation with each other (such as job/household income), there is little work done on determining a theoretical understanding between these measures so as to explain them in a more comprehensive way.

In explaining how different factors contribute to the quality of life, one of work and job satisfaction has always remained at the fore of such arguments and discussions. De (1975) argued that the quality of working life is a major determinant of the overall quality of life since, according to him, life without work has little to no meaning. With this argument, he means to state that the quality of life refers to the quality of life outside of one’s work, which is directly affected by it, such as family life, society, etc.

Sinha’s (1982) study followed studying the quality of life in the Indian case. This is of utmost relevance and importance to our own study in more ways than one. Both India and Pakistan are developing, South Asian countries, with similar cultural and social norms and demographic make-ups, even though the size of the population differs significantly. The Indian study was done to determine the linkages between the working quality of life and overall quality of life and how the two affect and correspond to the other’s influence. Though the study focused primarily on job satisfaction and its quality
of life, the study provided meaningful insights into how important the work quality of life is when measuring India’s (and by extension) Pakistan’s quality of life.

With such theoretical and definitional backing regarding the quality of life, the following paper seeks to add to the little existing knowledge on the quality of life in Pakistan and how it affects the different segments of society in the country. By taking seven major indicators and measures, the scientifically carried out survey and public opinion polls will explore the satisfaction of the Pakistani public with their quality of life. The paper will first discuss the key findings of the survey and experiment and present a summary of the findings. The paper will then move on to explain the scientific methods used, along with information regarding participants and respondents. The paper will then finally showcase the results of the survey in full, while analyzing what the quantitative results mean in explaining the quality of life in Pakistan.

**Key Findings**

The result of the quality of life survey in Pakistan was very revealing. Whereas on one end we learned that the overall satisfaction of life in Pakistan was perceived to be on the rise, and the majority felt satisfied in different aspects such as income, jobs, family life, etc., the perceived quality of life was not uniform in all segments of Pakistani society. On a cumulative scale of quality of life, comprising the average of the seven dimensions, we observed notable differences across income groups. The average net satisfaction for those who were in the highest income bracket was 76, whereas for those in the lowest bracket it was considerably lower at 62. Even though there remained differences among other categories of the population, the difference between income groups was the most vivid and clear-cut difference that was seen. Higher income resulted in higher satisfaction with quality of life. The finding seems intuitively valid, but the data provided further confirmation and allows us to understand the degree of difference across income groups. It also allows us to investigate whether this finding compares with data from other Asian countries where this regional study was carried out.
The fieldwork for this study was done during September 2013 among a nominally representative sample of 2600 men and women across rural and urban areas of all four provinces of Pakistan. The sample is representative of the adult population (age 18+) of the country with an error margin of 3-5% at 95% confidence level.

The methodology for constructing a cumulative scale of satisfaction with quality of life in Pakistan is explained later in this paper. It is primarily based on a two-step procedure. In step one, we compute net satisfaction on each of the seven critical dimensions of satisfaction with life. In step number two, we compute a simple average of the seven net scores of satisfaction with quality of life. This procedure gives equal weight to each of the seven dimensions of the quality of life.

Methodology

In this survey, people were asked to indicate their level of satisfaction in a number of areas, which amounted to seven major indicators. These indicators were: housing, household income, health, family life, food, human relations, and job. The question asked the respondents to show their level of satisfaction with each indicator. The four options that the respondents had were satisfied, somewhat satisfied, somewhat dissatisfaction, and dissatisfied, which showed the decreasing level of satisfaction with a certain attribute. Once the results and findings were consolidated, an average Net Satisfaction Index was created to better show the results of the survey. The net satisfaction was created by subtracting the negative ratings (dissatisfied and somewhat dissatisfied) from the positive ratings (satisfied and somewhat satisfied). Then the average was calculated by adding the net performance ratings of all the seven attributes and dividing them by 7. This rating was then useful in understanding how positive or negative the overall or cumulative satisfaction of the Pakistani people was.

Secondly, the average Net Satisfaction Index, based on the cumulative average of the seven attributes was also applied to different segments of society, mainly the divide between rural and urban, across income groups, through age groups, and gender-wise. By completing this calculation for every question and every segment of society, a
basis for comparison was made, through which the data could be better understood and analyzed accordingly.

Participants and Respondents

A representative sample, of 2655 persons, of the population of Pakistan was taken to conduct the survey. Of these people, 56% were male while 44% were female. The majority of the participants (56%) lay in the 30-50 age bracket whereas the most represented income wise were those with a gross monthly income between 3000 and 7000 Rs. Eighty-one percent of the respondents were married. One-thousand-seven-hundred-seventy-three of the respondents belonged to rural parts of Pakistan whereas 882 respondents were located in urban centers. The provincial breakdown of the respondents was also scientifically representative with 1530 from the Punjab, 624 from Sindh, 366 from Khyber-Pakhtunkhwa, and 135 respondents from Balochistan. Weighting exercises were carried out to determine the rural/urban and provincial breakdown of the population according to the national census.

| Gender       | Count | Column N % |
|--------------|-------|------------|
| Male         | 1469  | 56%        |
| Female       | 1131  | 44%        |
| Total        | 2600  | 100%       |

| Age          | Count | Column N % |
|--------------|-------|------------|
| Less than 30 years | 1002  | 39%        |
| 30-50 years   | 1445  | 56%        |
| 51-65 years   | 144   | 6%         |
| More than 65 years | 10    | 0%         |
| Total        | 2600  | 100%       |

| Occupation                                           | Count | Column N % |
|------------------------------------------------------|-------|------------|
| Big business                                         | 18    | 1%         |
| Medium business                                      | 197   | 8%         |
| Small business                                       | 318   | 12%        |
| Top level employee (Top level manager, professor, professional etc.) | 50    | 2%         |
| Medium level employee (Manager, Middle executive, High school teacher etc.) | 209   | 8%         |
| Occupation                                      | Count | Column N % |
|------------------------------------------------|-------|------------|
| Lower-level employee (Executive, Assistant, Support staff, Primary school teacher etc.) | 272   | 10%        |
| Top level skilled technician mechanic          | 35    | 1%         |
| Medium level skilled (Factory, craftsman etc.) | 148   | 6%         |
| Landlord with more than 12 acre land           | 18    | 1%         |
| Landlord with less than 12 acre land           | 124   | 5%         |
| Peasant/Agricultural labor                     | 61    | 2%         |
| Unemployed                                     | 54    | 2%         |
| Student                                        | 46    | 2%         |
| Retired                                        | 20    | 1%         |
| Housewife                                      | 1004  | 39%        |
| No response                                    | 27    | 1%         |
| Total                                          | 2600  | 100%       |
| Education                                      |       |            |
| No formal education                            | 581   | 22%        |
| Elementary school/junior high school/middle school | 1327  | 51%        |
| High school                                    | 307   | 12%        |
| Professional school/technical school           | 11    | 0%         |
| University/graduate school                     | 365   | 14%        |
| No response                                    | 9     | 0%         |
| Total                                          | 2600  | 100%       |
| Marital Status                                 |       |            |
| Single                                         | 351   | 13%        |
| Married (Including de facto marriage)          | 2104  | 81%        |
| Divorced/separated/widowed                     | 41    | 2%         |
| No response                                    | 105   | 4%         |
| Total                                          | 2600  | 100%       |
| Gross Monthly Income                           |       |            |
| Less than Rs. 3,000                            | 53    | 2%         |
| Rs. 3,000 - Rs. 7,000                          | 744   | 29%        |
| Gross Monthly Income                  | Count | Column N % |
|--------------------------------------|-------|------------|
| Rs. 7,001 - Rs. 10,000               | 441   | 17%        |
| Rs. 10,001 - Rs. 15,000              | 530   | 20%        |
| Rs. 15,001 - Rs. 30,000              | 603   | 23%        |
| More than Rs. 30,000                 | 201   | 8%         |
| No response                          | 29    | 1%         |
| Total                                | 2600  | 100%       |

| Family Structure                     |       |            |
|--------------------------------------|-------|------------|
| Single-person household              | 61    | 2%         |
| Married couple only (including de facto couples) | 165  | 6%         |
| A parent(s) and child(ren) who are not married (two generation household) | 1229 | 47%        |
| A parent(s) and child(ren) who is/are married | 708  | 27%        |
| Grandparent(s), parent(s), and child(ren) (three-generation household) | 319  | 12%        |
| Others                               | 46    | 2%         |
| No Response                          | 73    | 3%         |
| Total                                | 2600  | 100%       |

| Residence                            |       |            |
|--------------------------------------|-------|------------|
| Owner-occupied detached or semi-detached (duplex) house | 1734 | 67%        |
| Owner-occupied terraced house or unit in an apartment or condominium complex | 557  | 21%        |
| Rented detached or semi-detached (duplex) house | 194  | 7%         |
| Rented terraced house or unit in an apartment or condominium complex | 17   | 1%         |
| Other (a room in a relative’s home, etc.) | 24   | 1%         |
| Don't know                            | 9     | 0%         |
| No response                           | 65    | 3%         |
| Total                                | 2600  | 100%       |

Source: Gallup Pakistan Survey (2013– Conducted across: Nationally Representative Population)
**Survey Results and Analysis**

**Question:** Please tell me how satisfied you are with the following aspects of your life: Housing, Household income, Health, Family Life, Food, Human Relations and Job.

|       | Satisfied (1) | Somewhat satisfied (2) | Somewhat dissatisfied (3) | Dissatisfied (4) | Net Satisfaction Index \{(1+2)-(3+4)\} |
|-------|---------------|------------------------|----------------------------|------------------|-----------------------------------|
| a     | Housing       | 57%                    | 35%                        | 7%               | 1%                               | 84%                             |
| b     | Household Income | 39%                 | 44%                        | 15%              | 3%                               | 65%                             |
| c     | Health        | 38%                    | 48%                        | 13%              | 1%                               | 72%                             |
| d     | Family Life   | 38%                    | 47%                        | 14%              | 1%                               | 70%                             |
| e     | Food          | 32%                    | 47%                        | 20%              | 1%                               | 58%                             |
| f     | Human Relations | 28%                 | 50%                        | 21%              | 2%                               | 55%                             |
| g     | Job           | 27%                    | 44%                        | 22%              | 6%                               | 43%                             |

*Source: Gallup Pakistan Survey (2013– Conducted across: Nationally Representative Population)*

According to this survey, in which people were asked to rate their satisfaction with different aspects of their life, the one thing that satisfied the highest number of people was their housing. At the same time, the lowest number of people said that they were satisfied with either their job or human relations. This questionnaire is interesting because there was no high level of dissatisfaction from any aspect of life from the people. In all the categories barely a few people believed that they were dissatisfied with the said aspects of their lives. The average Net Satisfaction Index for all factors across Pakistan was a very big positive of 64.
Description of Findings

Indicator # 1- Satisfaction with Housing

Source: Gallup Pakistan Survey (2013– Conducted across: Nationally Representative Population)

However, a more introspective look at this reveals much more about the satisfaction people have in their lives in Pakistan. When it comes to housing, the provinces have a somewhat equal distribution of satisfaction. KPK residents were seen as being the most satisfied with their housing, followed by Punjab and Sindh. Even when comparing different income groups and their level of satisfaction with housing, the results remain somewhat the same all around. All across Pakistan, the average Net Satisfaction Index was 84 for housing. Across rural and urban, there was no major difference in rating, with 86 for rural and 81 for urban housing satisfaction. The lowest average net satisfaction for housing was 80 for those who earned less than Rs. 7000 a month, whereas it steadily increased up to 93 for those who earned Rs.30,000 and more. Age wise, those under 30 and those over 50 had a higher Average Net Satisfaction Index for housing compared to those between the two age groups, but for both it remained above 80 in all cases. The males and females showed an almost equal level of satisfaction on this index.
The level of satisfaction for household income was also quite high all across Pakistan. Overwhelmingly, the majority of Pakistan’s population felt that they were either somewhat or completely satisfied with their household income. A very low, albeit significant percent, however believed that they were not satisfied with their household income. In addition, in the income groups, those who earned between Rs. 7,000 and 15,000, revealed the highest degree of dissatisfaction amongst the income groups. The average Net Satisfaction Index for household income was much lower than that of housing with an average of 65. There was a sharp divide between the rural index at 69, and the urban at 57, clearly showing that there was much higher satisfaction in rural household incomes than urban ones. Surprisingly, the lowest Average Net Satisfaction Index for income was not from the lowest earners. The income-group of Rs. 7,000-15,000 showed a much lower index of 55 when compared to that of those who earned below Rs. 7,000, at 66. Then the satisfaction for income increased up to the Rs. 30,000 and above mark with a Net Satisfaction Index of 89.
Health saw an even higher level of satisfaction among the Pakistani population as a whole with more than 80% attributing some sort of satisfaction with health. Almost all provinces and income groups showed a similar trend of satisfaction or dissatisfaction as with the national trend. Health also showed a very highly positive average Net Satisfaction Index of 71. However, once again, the divide between rural and urban was very sharp, with rural at 77 and urban far lower at 60. Income wise, the average net satisfaction was fairly straightforward with an increasing trend from the lowest of 69 at the lowest income level and 74 at the highest. Age wise, it was the exact opposite. With those below 30 showing an average satisfaction index of 77, with those between 30 and 50 showing 69 and those over 50 at only 62. This trend showcased the lowering level of satisfaction of health with an increase in the age and an increasing level of satisfaction with rising income. Gender-wise, once again, it was almost even between the males and females.
The quality of family life also saw a similar trend of satisfaction nationwide and regionally as well. Similarly, people in the age group of 50 and above, also showed a higher degree of dissatisfaction with the quality of life than those in other age groups. The quality and satisfaction of family life was rated highly at 70 in the net average satisfaction index across all of Pakistan. At the same time, the difference between rural and urban in this regard was very marginal, with both showing very similar figures in the index. The figures for the average satisfaction with family life were somewhat difficult to analyze. Those with incomes between 7,000-15,000 and those above 30,000 showed higher satisfaction in the index compared to those who earned under 7,000 or between 15,000-30,000, though the differences were all very marginal. The quality of family life for the age groups of under 30 or between 30 and 50 were very much higher in the index than that of those who were over 50 years of age. Whereas the aforementioned two showed almost the same (70 and 72 respectively), those above 50 rated it averagely with 54, showing a much higher dissatisfaction with family life than the other ages.
Indicator # 5- Satisfaction with Food

In comparison to other aspects of the quality of life, food had higher dissatisfaction from all around Pakistan. Whereas around 70 percent were somewhat or more than somewhat satisfied with the quality of life with regards to food, those dissatisfied were in a higher number than the previously mentioned aspects. The dissatisfaction was highest when seen with regards to the rural areas in all provinces, with rural areas marking higher dissatisfaction than urban areas. In addition, from income groups, those who earned less than Rs. 7,000 showed more dissatisfaction with food in their quality of life than other income groups.

The Average Net Satisfaction Index for food was much lower than the others with 58, even though the difference in rural and urban areas was not too drastic. However, with income, there were sharp changes in the satisfaction index of the two lower income groups with 55 and 53 respectively, whereas the two higher income groups had an average satisfaction index of 67 and 71 respectively. The quality and satisfaction of food in the index was very much relative to income as well. Similarly, with age, those below 50, had a very low average satisfaction rating in the mid-50s whereas those above 50 had a substantially higher index rating at 89.
Significantly, like food, people also showed higher dissatisfaction with the quality of human relations in their life compared to other aspects. Analyzing this further, it is revealed that this dissatisfaction with human relations is higher in the provinces of KPK and Balochistan than in Sindh and Punjab, and similarly higher amongst Pashto speakers compared to speakers of other languages. Income groups revealed similar amounts of dissatisfaction with human relations. The average Net Satisfaction Index with regards to human relations was one of the lowest in all of Pakistan with a meager 55. Urban satisfaction was somewhat higher than rural with an index rating of 58 over a rural rating of 53. The income index showed somewhat of an odd pattern. The index across income groups fell from 56 to 52 till the 30,000 mark whereas it rose to over 64 with those who earned over 30,000. Similarly, in the age bracket, those under 30 showed a higher index rating of satisfaction with human relations at 58 than those between 30 and 50, who showed an index rating of 53. The highest in this regard was those who were above 50, who showed an average index rating of 59.
The final aspect of life that was analyzed in this question was the job of the people. The level of dissatisfaction with the quality of life with regards to jobs was highest when compared to other aspects. This dissatisfaction was more pronounced in Balochistan and KPK and was more prevalent in age groups of those below 30 and those above 50; whereas those between 30 and 50 showed a somewhat higher level of satisfaction with their jobs.

The happiest age group was that of 30-50 which rated highly at 52 whereas those under 30 rated only at 32 and those over 50 rated only at 35. This indicates a higher satisfaction with jobs in mid-life rather than close to retirement or early beginnings.

The lowest ranked on the Average Net Satisfaction Index was jobs, with a below 50 rating of 43. Those with incomes from under 7,000 up to 30,000 had very low average satisfaction index ratings (with 42, 32 and 51 respectively) whereas those who earned over 30,000 had an average rating in the index of a high 75, clearly showing that those who earned more than 30,000 were more satisfied with the quality of their jobs. The happiest age group was that of 30-50 which rated highly at 52 whereas those under 30 rated only at 32 and those over 50 rated only at 35. This indicates a higher satisfaction with jobs in mid-life rather than close to retirement or early beginnings. Males showcased a much lower average rating of 38 compared to that of females which was 49 – pointing towards better job satisfaction for the women in Pakistan.

Source: Gallup Pakistan Survey (2013– Conducted across: Nationally Representative Population)
Analysis of 7 Dimensional Cumulative Index of Satisfaction with Quality of Life

The cumulative index based on the average of the seven indicators for different segments of society reveals a number of aspects regarding satisfaction with daily life. On a national level, we see that the cumulative net index of average satisfaction is relatively high at 64; and when we compare rural and urban indexes, we see that there is not much difference within these. For language groups as well, the difference between different language speakers does not really amount very highly on the cumulative index, even though the Pashto and Balochi speakers seem to have the highest number on this index. With regards to income, as mentioned, the difference which is intuitive is proved by the data, whereby with increasing income, we also see more satisfaction on the cumulative index of satisfaction. By and large, the most major difference or a clear trend in net satisfaction across the average of all seven indicators can only be seen through the different income groups and barely through the other factors.
Average Net Satisfaction Index (Question: Please tell me how satisfied you are with the following aspects of your life: Housing, Household Income, Health, Family Life, Food, Human Relations and Job.)

|                      | Housing | Household Income | Health | Family life | Food | Human Relations | Job |
|----------------------|---------|------------------|--------|-------------|------|----------------|-----|
|                      | Net Satisfaction Index | Net Satisfaction Index | Net Satisfaction Index | Net Satisfaction Index | Net Satisfaction Index | Net Satisfaction Index | Net Satisfaction Index |
| All Pakistan         | 84      | 65               | 71     | 70          | 58   | 55             | 43  |
| Location             |         |                  |        |             |      |                |     |
| Rural                | 86      | 69               | 77     | 69          | 57   | 53             | 43  |
| Urban                | 81      | 57               | 60     | 73          | 61   | 58             | 44  |
| Language             |         |                  |        |             |      |                |     |
| Urdu                 | 72      | 59               | 66     | 79          | 64   | 64             | 41  |
| Punjabi              | 88      | 62               | 72     | 69          | 57   | 57             | 55  |
| Sindhi               | 81      | 66               | 51     | 65          | 49   | 51             | 45  |
| Pashto               | 95      | 83               | 83     | 85          | 66   | 39             | 31  |
| Balochi              | 72      | 65               | 73     | 66          | 71   | 67             | 62  |
| Saraeeke             | 83      | 44               | 96     | 60          | 51   | 72             | 22  |
| Others               | 79      | 71               | 67     | 48          | 45   | 41             | 6   |
| Monthly Household Income |     |                  |        |             |      |                |     |
| Very Low             | 80      | 66               | 69     | 69          | 55   | 56             | 42  |
| Low                  | 80      | 55               | 71     | 71          | 53   | 55             | 32  |
| Middle               | 92      | 75               | 73     | 69          | 67   | 52             | 51  |
| High                 | 93      | 81               | 74     | 77          | 71   | 64             | 75  |
| Age of the Respondent|         |                  |        |             |      |                |     |
| Under 30             | 86      | 61               | 77     | 70          | 55   | 58             | 32  |
| 30 – 50              | 82      | 66               | 69     | 72          | 57   | 53             | 52  |
| 50+                  | 92      | 79               | 62     | 54          | 89   | 59             | 35  |
| Gender               |         |                  |        |             |      |                |     |
| Male                 | 84      | 66               | 72     | 71          | 59   | 54             | 49  |
| Female               | 85      | 65               | 71     | 70          | 58   | 56             | 49  |

Source: Gallup Pakistan Survey (2013– Conducted across: Nationally Representative Population)
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