DETERMINANTS OF WELLBEING IN A SOUTH AFRICAN TOWNSHIP

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—Abstract—

Life evaluations capture a reflective assessment on a person’s life or some specific aspects of it. Given the relative lack of empirical work on subjective wellbeing (SWB) amongst residents in South African townships, this paper seeks to fill that gap by exploring the determinants of SWB in a township of Kwakwatsi. This study is based on household data collected through a survey to investigate the factors that might affect wellbeing. A multiple regression model was used to determine the impact of selected socio-economic variables on wellbeing. The mean score for wellbeing was 12, indicating that on average people in the area are substantially dissatisfied with their lives. The age, educational attainment, employment status of the head, and the number of household members employed were found to exert a positive impact on wellbeing, whereas household size was negatively associated with wellbeing. Information provided through the study can be used when planning interventions relating to low income residents.

Key Words: Wellbeing, Life satisfaction, Determinants, Township, South Africa.
JEL Classification: D63, I31, J11, J17, R20.
1 INTRODUCTION

South Africa has undergone significant changes since the end of apartheid in 1994. The national government has implementing various policies aimed at redressing the injustices of the past by expanding access to employment opportunities by the previously marginalised section of the population. The expectation was an increased wellbeing and feelings of inclusiveness among the population. It is therefore important to understand the views of the residents with regards to how their lives have turned out in democratic South Africa. Satisfaction with life is evaluated under the concept of subjective wellbeing (SWB). SWB is a broad category of phenomena that include people’s emotional responses, domain satisfactions and global judgement (Diener et al., 1999). It therefore refers to a person’s cognitive and affective evaluations of his or her life. In its composition, SWB involves two main aspects, namely, affective and cognitive domains. The affective domain refers to positive and negative emotions, while the cognitive domain refers to satisfaction with life (Diener, et al., 1985). Satisfaction with life is described as a conscious cognitive judgment of life in which individuals compare their life circumstances with a self-imposed standard (Bendayan et al., 2013). In other words, satisfaction with life refers to a subjective appraisal of one’s personal life. Overall satisfaction with life is sometimes considered to be an indicator of quality of life because it assists in determining how an individual is satisfied with his/her life as a whole (Diener et al., 1997).

Considering that individuals evaluate their wellbeing based on their expectations, values and past experiences, there are various factors that influence SWB. These factors are associated with internal aspects such as self-esteem and optimism; and external factors such as jobs, family size, marital status, education, health, leisure and wealth (Diener et al., 1999; Heller, et al., 2004; Maluka & Grieve, 2008). These internal and external components of SWB are significantly linked (Sam, 2001) but Diener et al., (1999) points that each component needs to be studied in its own right. Hence, the current study focuses on the external components of SWB which are related to economic aspects of happiness. Widely known instruments of measuring levels of wellbeing amongst individuals include the Satisfaction With Life Scale (SWLS) and the Rosenberg Self-Esteem Scale (RSES) (Maluka & Grieve, 2008). The SWLS is based on the conceptualisation of subjective wellbeing. It was developed by Diener et al. (1985), and is mostly used as an assessment of an individual’s general sense of satisfaction with their life as a whole. Thus, subjective wellbeing or satisfaction with life is determined
cognitively by individuals using their own criteria. Although the SWLS is presented as a global evaluation of life, Heller et al. (2004) found substantial intra-individual variation in life satisfaction that is linked to domains related demographic and socio-economic factors. Hence, SWLS seems to be an appropriate instrument in measuring the role socio-economic variables have in determining wellbeing functions.

In the South African context, satisfaction with life, as a component of subjective wellbeing, has been widely researched in culturally diverse settings. Møller (2001) found a significant gap on wellbeing status between Black and White South Africans in 1999. She attributed this gap to differences in quality of life due to high levels of inequality between these two racial groups. Maluka & Grieve (2008) and Westaway et al. (2003) investigated the suitability of using SBW measurement instruments among disadvantaged South African communities. Their findings revealed that most of these instruments are useful in cross-cultural settings. A number of studies (Bookwalter & Dalenberg, 2004; Cramm, et al., 2010; Nolan & Surujlal, 2012; Patel et al., 2009; Westaway et al. 2003; Westaway et al., 2007) investigated the influence of socio-economic variables on subjective wellbeing within various poor communities in South Africa. These studies found that SBW is influence by factors such as age, education, income, employment status, religion, and gender. Kingdon & Knight (2006) used a South African household survey to evaluate the relationship between subjective wellbeing and conventional measures of poverty. There is still a need to focus on wellbeing functions and their relationship household characteristics among township dwellers. The measurement of wellbeing and life satisfaction and the understanding of their determinants are therefore crucial to effective policy formulation. This analysis is important because it could provide an understanding of the impact of socio-economic and demographic variables on wellbeing in other developing countries.

2 METHODS

2.1 Participants

The study reported here is based on a household survey using questionnaires. A random sample of 225 households was interviewed in the township of Kwakwatsi, in the Free State Province of South Africa. Two interviewers, residents of the area, were recruited and trained to administer the questionnaire during
March/April 2013. The main respondent to the survey was the household head – in total 69 females and 156 male household heads participated in the study. In the context of this study, a household is defined one or more persons who pool their income to buy food, live (eat and sleep) together in one or more houses/huts/living units on the same plot/site and depend financially on one another. Kwakwatsi is a former black residential township for the town of Koppies, located 180km south of Johannesburg. The area is part of the Ngwathe Local Municipality, with its head office in Parys. The area could be regarded as a semi-urban area, evidenced by lack of economic development and conditions of poverty (Sekhampu, 2012).

2.2 Instruments and procedures

A quantitative research approach was adopted for the study reported here. Arising from a comprehensive literature study, a questionnaire was developed. The questionnaire was divided into two sections. Section A comprised questions that sought demographic data of the participants. Section B sought information on the participant’s satisfaction with life. This study used the Satisfaction With Life Scale (SWLS), developed by Diener et al. (1985). This scale has been tested for applicability in a South African racial and cultural context (Westaway et al., 2003; Maluka & Grieve, 2008). The scale consisted of 5 items, namely: ‘in most ways my life is close to ideal’, ‘the conditions to my life are excellent’, I am satisfied with my life’, ‘so far I have got the important things I want in life’ and ‘if I could live my life over, ‘I would change almost nothing’. These items measure global cognitive of subjective wellbeing and are evaluated on a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). The range of possible scores is from minimal satisfaction with life (5) to very high satisfaction with life (35), where a score of 20 represents the neutral point on the scale.

2.3 Regression model

Firstly, descriptive statistics were used to describe the participants and to contribute to the interpretation of the determinants of wellbeing in the township of Kwakwatsi. Secondly, a multiple regression model was used to determine the effect of socio-economic and demographic factors on participants’ judgement of their own life. The equation for this multiple regression model is as follows:

\[ SWLS_i = \beta_0 + \beta_1 AH_i + \beta_2 HHS_i + \beta_3 NPE_i + \beta_4 EH_i + \beta_5 ESH_i + \beta_6 HHI_i + \beta_7 MH_i \]
+ \beta_8 GH_i + e_i

Where: SWLS_i = wellbeing status for a household (i), wellbeing score; AH_i = the age of the head of the household (i); HHS_i = household size, (the number of persons within a household (i)); NPE_i = the number of household members employed; EH_i = educational attainment of the head of the household (i) (years of schooling); ESH_i = employment status of the head of the household (i) (1 if unemployed and 0 otherwise); HHI_i = household’s income (monetary value, Rands per month); MH_i = marital status of the head of the household (i) (1 if married and 0 otherwise); GH_i = gender of the head of a household (i) (1 for female and 0 otherwise); \beta_1 to \beta_8 = coefficients; \beta_0 = the intercept and e_i = the error term.

3 RESULTS

3.1 Demographics

The descriptive statistics for the sample population indicates that the youngest household head was 29 years old, with the oldest at 80 years. The average age of the participants was 49. The number of persons per household varied from 1 to 10. The average household size was recorded at 4 members per household. With regard to the educational attainment, most (73%) reported that they had primary school education, 3% had no educational attainment, while 23% obtained tertiary education training. The average number of years of schooling was 6 years. The lowest household income was recorded at R290, with the highest at R18 920. Average household income was R4 254 per month. The average number of employed persons per household was 2 with a maximum of 5 persons. When it comes to the employment status of the participants, 73% were employed. Seventy two percent (72%) of the respondents reported that they were married and 31% of the total sample was female.

3.2 Analysis of the wellbeing status

As explained under the methodology, the subjective wellbeing score was captured through a range of questions judging the cognitive aspects of subjective wellbeing. Table 1 shows the distribution of wellbeing scores in each category. The score ranges from 5 to 35, with 5 indicating negative wellbeing. Individuals
who score in this range 5-9 are said to be extremely unhappy with their current life, while respondents who score in the range 30-35 feel that things are going very well (Diener et al., 1985). The internal reliability for the SWLS dimensions was measured using the Cronbach’s \( \alpha \) coefficient. The Cronbach’s \( \alpha \) coefficient for the SWLS (\( \alpha=0.832 \)) was higher than the recommended benchmark of 0.7, indicating good scale reliability. All the items on the scale met the corrected item-total correlation coefficient criterion of 0.40 (the corrected item-correlation coefficients ranged between 0.53 and 0.76). The results of the study indicate that 37\% (n=83) of the respondents were extremely dissatisfied with their current life. The mean score for the sample population was 12. This indicates that on average people in Kwakwatsi Township are substantially dissatisfied with their lives. Nine percent (9\%, n=20) of the participants had a wellbeing score greater than 20.

Table 1: Wellbeing status of participants

<table>
<thead>
<tr>
<th>Category</th>
<th>N</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-9</td>
<td>83</td>
<td>37%</td>
</tr>
<tr>
<td>10-14</td>
<td>90</td>
<td>40%</td>
</tr>
<tr>
<td>15-19</td>
<td>32</td>
<td>14%</td>
</tr>
<tr>
<td>20-24</td>
<td>13</td>
<td>6%</td>
</tr>
<tr>
<td>25-29</td>
<td>7</td>
<td>3%</td>
</tr>
<tr>
<td>30-35</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Total</td>
<td>225</td>
<td>100%</td>
</tr>
</tbody>
</table>

### 3.3 Determinants of wellbeing

The results of the regression model on the factors that affect the reported wellbeing status are shown in Table 2. The important thing to draw from this table is merely which independent variables show up as significant. This is because the \( \beta \)-coefficients obtained from the regression model do not have straightforward interpretations. The elasticity (ey/ex) coefficients better explain the changes in the reported wellbeing due to a change in a selected socio-economic and demographic variable (ceteris paribus). The results of the survey show that household size (HHS), the number of household members employed (NPE), the age (AH), educational attainment (EH) and employment status of the head of household (ESH) significantly influence the reported wellbeing status. The age, educational attainment, employment status of the head of household, and the number of household members employed were found to exert a positive impact on wellbeing,
whereas household size was negatively associated with wellbeing. The coefficient for the variable (HHS:-1.076) was significant at 1%. For this model, the age of the household head, $t (225) = 7.52 \ p <0.01$ is the most significant predictor of wellbeing. This implies that an increase in age is associated with a positive change in the participants’ assessment of their wellbeing.

Table 2: Determinants of wellbeing

| Variables | Coef. | Std. Err. | T     | P>|t|  | ey / ex. |
|-----------|-------|-----------|-------|------|---------|
| AH        | .171  | 0.023     | 7.52  | 0.000| 0.1714  |
| HHS       | -1.076| 0.403     | -2.67 | 0.008| -0.1993 |
| NPE       | .5272 | 0.248     | 2.13  | 0.034| 0.1994  |
| EH        | .223  | 0.097     | 2.29  | 0.023| 0.9811  |
| ESH       | 1.995 | 1.024     | 1.95  | 0.053| 0.1328  |
| HHI       | -0.000| 0.000     | -0.90 | 0.369| ...     |
| MSH       | 0.735 | 0.988     | 0.74  | 0.458| ...     |
| GH        | 0.772 | 0.945     | 0.82  | 0.414| ...     |

Note: ...variable not included because it was not statistically significant

Household income (HHI), the marital status (MH) and gender of the household head (GH) were not important in explaining the variations in the reported wellbeing status of the participants. The variables were not statistical significant, even at the 10% level of significance. The model containing all explanatory variables was significant, indicating that the model was able to distinguish between the various explanatory variables used in the model. The regression model, as a whole, explained 64.47% ($R^2 = .6447$) of the variations in all cases. The F-ratio for the model was calculated at 147.49, which is also highly significant (p <.001). In other words, all independent variables jointly have a significant influence on wellbeing status.

4 DISCUSSION AND CONCLUSION

The study sought information on the wellbeing status of households in a South African township. A multiple regression model was used to determine the impact of selected socio-economic and demographic variables on the reported wellbeing status. The results of the regression analysis show that household size, the number of household members employed, the age, educational attainment and employment status of the head of household significantly influence the reported
wellbeing status. Household size was negatively related to wellbeing. The coefficient for household size (HHS: -1.076) was negative and significant at 1% – a percentage increase in household size was associated with a 19.93% reduction in the reported wellbeing score. A significant relationship between age and wellbeing status implies that the older a household head is, the more satisfied he/she is with his/her life. These particular findings are consistent with previous studies (Kingdon & Knight, 2006; Knight, et al, 2009; Le Roux & Kagee, 2008) that found a significant relationship between wellbeing status and age or house size. A positive relationship between educational attainment of the head of household and satisfaction with life implies that household heads with higher level of education tend to be satisfied with their lives. This finding is similar to other studies (Bookwalter & Dalenberg, 2004; Le Roux and Kagee, 2008) that found a significant relationship between wellbeing status and age or household size. This study found a positive association between educational attainment and satisfaction with life, implying that household heads with higher educational attainment tend to be satisfied with their lives. A percentage increase in educational attainment was associated with a 13.28% increase in the reported wellbeing status. This finding is consistent with other studies (Kingdon & Knight 2006; Reynolds & Ross, 1998).

Contrary to other studies (Diener et al., 2000; Hutchinson et al., 2004; Nolan & Surujlal, 2012) that found a positive relationship between marriage and satisfaction with life, the current study found no significant relationship between these two variables. However, this finding is consistent with other studies (Knight, et al, 2009; Le Roux & Kagee, 2008) that found no significant relationship between marital status and wellbeing. This therefore confirms the finding by Diener et al. (2000) that the effect of marital status on satisfaction with life differs across culture and nations, depending on the level of individualism within society. Furthermore, the current study found no significant relationship between household income and wellbeing status; and this is not in line with other studies (Bookwalter & Dalenberg, 2004; Knight, et al, 2009) that found a significant positive relationship between these two variables. Kingdon and Knight (2006) explains that wellbeing depends on relative income, defined by the reference
group or the reference time in the mind of people. These authors add that income explains only a small proportion of the variation of wellbeing, especially in poor communities. This may therefore be a plausible explanation behind this non-significant relationship between wellbeing status and income in the township of Kwakwatsi.

To conclude, this study analysed data from a random sample of 225 households in a South African township of Kwakwatsi, in the Free State Province of South Africa. On average, residents of the township of Kwakwatsi appear to be substantially dissatisfied with their lives. Multiple regression analysis showed that the wellbeing status of households in the township of Kwakwatsi is explained by a range of socio-economic and demographic factors, including age, education attainment, employment and household size. Findings of the current study may assist policy makers in planning interventions relating to low income residents. The limitation of this study may be related to the possibility that the individual respondent, who answered survey questions, was giving the answer mostly with his own personal satisfaction level rather than that of the household as a whole. However, this should not be a major limitation if there are interdependencies in perceived wellbeing among members of the household (Kingdon & Knight, 2006).

BIBLIOGRAPHY


