

ERSA Research Brief

April 2019

Quality of life: validation of an instrument and analysis of relationships between dimensions

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Background

The conventional approach to measuring quality of life was centred on the use of income measures such as GDP. There has, however, been growing acceptance of the limitations of this approach and of the need for a more multifaceted measure of quality of life. For example, the *Report by the Commission on the Measurement of Economic Performance and Social Progress* states, “[t]he emphasis should be shifted from measuring economic production to measuring people’s wellbeing” (Stiglitz et al. 2009:12). People’s wellbeing reaches much wider than income and includes multiple dimensions, such as health, education, housing and social relationships. To find an adequate instrument to measure this multi-dimensional concept is a challenge. However, it is almost a universal aim of nations, including South Africa, to enhance the quality of life of people. It is thus of the utmost importance to find a reliable, validated measure of quality of life. As Joseph Stiglitz states, “what you measure affects what you do, if you don’t measure the right thing, you don’t do the right thing”.¹

Therefore, in this research, our objectives are to develop a reliable measure of quality of life by firstly validating an instrument of quality of life for the Gauteng city-region (GCR), the economic centre of South Africa. Secondly, using the newly validated dimensions of quality of life, we investigate the simultaneous relationships between these dimensions using confirmatory factor analysis (CFA). The dimensions included in the analyses to describe the quality of life of the people in the GCR are designated ‘housing and infrastructure’, ‘social relationships’, socio-economic status (‘SES’), ‘health’, ‘safety’ and ‘governance’. A deeper and more evidence-based understanding of how these dimensions of quality of life are related with one another, may have a significant impact on how policies are designed, implemented and assessed.

Research findings

We find that ‘housing and infrastructure’, ‘social relationships’, socio-economic status (‘SES’), ‘health’, ‘safety’ and ‘governance’ are valid measures of the quality of life of the people in the GCR. These dimensions, thus, give a reliable reflection of the quality of life and the well-being of the people in the region.

Furthermore, we find positive, significant relationships between all the dimensions of quality of life, except for the relationship between ‘housing and infrastructure’ and ‘health’. The non-significant relationship between these two dimensions likely relates to an indirect relationship via a variable such as income. The associations between the various dimensions, differs in the strength of the respective relationships. Strong relationships are found between the dimension ‘SES’ and each of the dimensions ‘housing and infrastructure’ and ‘social relationships’, consistent with the existing literature. Weak relationships are apparent between ‘governance’ and all the other dimensions of quality of life, with the exception of the dimension ‘safety’. These weak relationships are likely because the association between an item such as ‘voting’ (governance) and the items measuring other dimensions of quality of life such as ‘satisfaction with health’, not being directly observable. Nevertheless, ‘governance’ and ‘safety’ show a strong relationship, which is intuitive given the role of government in protecting citizens’ safety.

¹ Quoted in the New York Times, October 4, 2009.

Policy Implications

1. The provision of basic infrastructure, including housing, sanitation, electricity and water, is strongly related to the other dimensions and therefore any improvement in this dimension is associated with improvement in the well-being of South Africans.
2. Improving health care and making quality education accessible to learners are fundamental, as the improvement of health care and education have spill-over effects, which is positively related to all other dimensions of quality of life.
3. Indicators of social wellbeing, such as close family ties, the importance of friendships and taking part in community activities, are important to consider. It has been shown that the dimension of social relationships is a strength among South African communities and make them more resilient to shocks. Associated with this is the need for community infrastructure such as public recreational facilities, and the enforcement of labour laws to allow people to have time with their families and friends.
4. It is worth noting that levels of satisfaction with local governments are relatively low, and in general this dimension (governance) is not strongly correlated to any other dimensions of quality of life.

Local communities in Africa benefit from protected areas through a number of activities such as grazing their livestock and revenues gained from touristic activities. These two activities are not independent because the feeding habits of large herbivores such as elephants prevent bush encroachment thus maintaining healthy grasslands. In addition, the way the local community manages the elephants can substantially influence their reproduction. Both the grasslands which provides pastures for their livestock and elephants could substantially and drastically deteriorate due to poor management. If the elephant population drops too low, it would become harder for them to reproduce. Too few elephants would then result in bush encroachment seriously preventing domestic animals from grazing. This development can result in permanent changes from an elephant-rich grassland to an elephant-poor bushy area, which holds much fewer ecosystem services for the local community. Would the community spontaneously succeed in maintaining the elephant stock and grassland quality at a satisfying level or not? What kind of policy intervention would help reach the desired outcome? Should the authorities inform the community about these dynamics? Should they instead introduce a quota, a lower limit for the elephant stock that if trespassed would be sanctioned with punishment in the form of a fine to pay?

A team of researchers from the University of Cape Town and the Beijer Institute of Ecological Economics in Stockholm investigated the behaviour of resource users to policy interventions like sanctioned quotas and information provisioning in a collaborative research project. The research team performed an experimental study among communities that are managing common pool wildlife in Zimbabwe under the banner of Communal Areas Management Programme for Indigenous Resources (CAMPFIRE). They found that user groups manage these resource systems more efficiently when faced with either a policy intervention (sanctioned quota), or information about the possibility of a drastic drop in stocks or combination of both. Although a sanctioned quota performs better than information under some circumstances, information can be a good substitute for a sanctioned quota in other circumstances. However, the combination of both interventions is better than either quota or information in managing linked resources. This study also provides pragmatic evidence to policymakers and development practitioners of the role of carrot and stick institutions versus information provisioning in governing common-pool wildlife in Southern Africa. If their aim is just to avoid a drastic drop in linked resources, they can either use a policy intervention with sanctioned quota or information. The combination of both types of interventions might be most appropriate for users to manage their resources well and increase their welfare.