



Research Briefs

Local government

Do metropolitan municipalities provide better services to a community?

The current single-tier metropolitan municipalities in South Africa were intended to provide more efficient services than the former two-tier system. The single-tier system succeeded in justifying the 'one city, one tax' base slogan, and created a better instrument for integrated land use, transport and infrastructure investment than the former two-tier system. However, in a study undertaken by Robert Cameron of the University of Cape Town and colleagues, they found that councillors within single-tier municipalities fail to communicate with their constituents. Councillors are not assigned delegated powers to play a direct role in their respective wards or in the geographical area which they represent. Additionally, proportional representation has led to bloated councils which contribute little in terms of governance. Cameron et al. also found that ward committees have failed in their efforts to contribute meaningfully to their respective communities, as a result of the politicisation of community structures. They argue that community development workers, working under the authority of the respective provinces, have a negative effect on the intended role of ward committees.

Afr J Public Aff. 2011;4(3):28–44.

Statistics

Getting more from confirmatory factor analysis modelling

The need to test for measurement equivalence in confirmatory research, especially when measurement instruments with clearly defined subdimensions are used, has become increasingly important. However, in South Africa, although researchers often make use of instruments developed elsewhere and apply them across different cultural groups or other subgroupings, these studies rarely evaluate the measurement invariance of the instruments. This situation may lead to invalid findings. The methodology for invariance testing for a first-order confirmatory factor analysis is well documented in the literature, but the same cannot be said for a second-order confirmatory factor analysis model. In addition, it is very often of interest to include means in the analyses, using means and covariance structure analysis to investigate differences between groups in the structural part, and between the means of latent variables. Most methodological papers on this topic are not very clear on how means should be treated in confirmatory factor analysis models. Also, the mathematical model that underlies a second-order model is not well documented. In a paper by Arien Strasheim from the University of Pretoria, empirical examples are used and the syntax for two software packages that are frequently used for invariance testing, namely LISREL 8.8 and AMOS 19, are provided. In Strasheim's paper, the procedure is set out so that readers who are less familiar with matrix algebra can link the equations with the symbols used on the path diagram, and correspond these to the syntax provided in the appendices.

Manage Dyn. 2011;20(4):38–75.

Municipal administration

Could traditional leaders contribute significantly to integrated development plans?

There has been a concerted attempt by post-apartheid governments to integrate traditional authorities into the system of local government to try and enhance democratic government, but several constraints have been experienced in this process. In a study conducted in the Vhembe District Municipality (Limpopo Province), P.A. Brynard and colleagues from the University of Pretoria found that although sufficient knowledge and experience existed in traditional authorities to make worthwhile contributions to integrated development plans for district municipalities, traditional leaders are not actively involved in the planning processes preceding the compilation of such plans. The authors argue that involvement of traditional authorities could be beneficial if their leaders and systems of governance are effective.

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Media studies

An exploration of the gaps in science communication between the science and the media professions

Public understanding of science is vital as it counters pseudoscientific claims. The relationship between scientists and the media, which serves as a channel to communicate scientific findings to the public, was examined in South Africa by George Claassen of Stellenbosch University. A total of 740 South African researchers and 360 journalists completed a comprehensive questionnaire to investigate the depth of, and possible reasons for, distrust between the two professions. Significant differences were found between perceptions of scientists and journalists about the role of science in society and how it could be communicated to the public. Suggestions to bridge the gap between scientists and the media include science desks headed by well-trained science editors and reporters, and training to enable scientists to communicate better with the media.

Communicatio. 2011;37(3):351–366.

Public finance

Can municipalities provide sustainable services to their respective communities?

The South African Constitution of 1996 requires municipalities to provide sustainable services to their communities. However, existing backlogs, high levels of indigence and limited revenue bases have mitigated against this goal. D.J. Fourie and colleagues from the University of Pretoria argue that current fiscal arrangements, including the division of revenue as dictated by the *Division of Revenue Act* prohibit municipalities from carrying out their mandates. By using the Rwandan case to make comparisons with municipal fiscal relations in South Africa, they conclude that managerial capacity is a prerequisite for improved service delivery. The authors argue that although fiscal decentralisation should be considered in South Africa, it could improve service delivery only if managers in local government have the necessary skills to implement efficient and effective municipal administrative systems.

Afr J Public Aff. 2011;4(3):99–112.

Ecology

A vegetation-based hierarchical classification for seasonally pulsed floodplains in the Okavango Delta, Botswana

A team of researchers led by Mike Murray-Hudson from the University of Botswana has published a classification scheme for the seasonal floodplains of the Boro-Xudum distributary of the Okavango Delta in Botswana. Subject to an annual flood-pulse from an inland-flowing river, this vast floodplain has an inundated area varying from a mean low of 3600 km² to a mean high of 5400 km². A stratified random sample of 30 sites was surveyed for species composition and abundance in 2007, using multiple quadrats along transects orthogonal to the floodplain's long axis. A combination of indicator species analysis and ordination was used to derive a hierarchical classification system for the floodplain, based on species assemblages. Indicator species analysis was used to identify ecologically meaningful levels of division, at 4 and 9 classes. The four main classes of floodplain were Dry Floodplain Grassland (main indicators were *Urochloa mosambicensis*, *Ipomoea coptica*, *Chloris virgata*, *Pechuel-Loeschea leubnitziae*); Seasonally Flooded Grassland (*Nicolasia costata*, *Eragrostis lappula*, *Cyperus sphaerospermus*, *Setaria sphacelata*); Seasonally Flooded Sedgeland (*Eleocharis dulcis*, *Leersia hexandra*, *Oryza longistaminata*, *Cyperus articulatus*); and Seasonal Aquatic Communities (*Sacciolepis typhura*, *Eleocharis variegata*, *Fuirena pubescens*, *Cynidium tubulosum*). The authors provide an objective way of classifying floodplains in this unique area in an ecologically meaningful way, which will assist in monitoring changes in vegetation resulting from hydrological change.

Afr J Aquat Sci. 2011;36(3):223–234.

Greek philosophy and the Humanities

Human nature and the role of reason in public affairs

John Anton from the University of South Florida, USA examines the different views of human nature that have been elaborated by intellectuals in the second half of the past century, and which continue to enjoy wide circulation. While these approaches to the place of reason in human affairs all claim to have 'the truth' on their side, there is no universal agreement on the main issues regarding values and ultimate ends. Not all researchers agree on the place and importance of reason in the management of cultural and political affairs. We face the problem of how to assign to reason the place it deserves in the handling of our everyday concerns from politics to religion, from science to art, and from our personal life to national and international policies. The embedded traditional conflict, namely reason versus faith, has once again become a fundamental issue in our lives. Anton's paper draws attention to the intrusion of irrationality in contemporary cultural, political and educational affairs.

Phronimon. 2011;12(1):5–18.