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Research-driven: A Scientific Profession Accountable within Contextual Realities

Audiology and speech-language pathology are professional qualifications in the sciences of these respective fields. They are sciences because the professions are founded on the principle of scientific enquiry which employs logical reasoning processes to describe, solve, understand and explore phenomena and relationships (Maxwell & Satake, 2006). As practitioners of these respective sciences we owe our professions to the dedicated application of scientific enquiry over time to the field of communication disorders and other basic sciences. Because they are sciences, the practice of audiology and speech-language pathology are inherently research-orientated. This means that the professions are not only the offspring of accumulated research but also imply that practising it accountably requires that each clinician, to an extent, also be a researcher. It is this inextricably mutual relationship between research and practice that stimulates the growth and development of our services (Walley et al., 2007).

The development and improvement of our professions should be guided by our scope of practice and the populations to be served in the unique South African context. It should not therefore be guided by reigning political agendas but the professions should rather abide by principles that transcend political ideology, which reflect the deepest aspects of human dignity and respect for all persons. Past political ideologies, which did not abide by this principle, resulted in a legacy of healthcare inequities in South Africa. For example, approximately 80 to 85% of the South African population relies on the public healthcare sector although the remaining 15 to 20% of the population that accesses private healthcare services, utilizes 61% of the country's total health care expenditure (ANC Today, 2005). This figure provides sufficient evidence that as professions we should not subscribe to political philosophies but should rather concern ourselves with upholding the principle of respect for all persons within our professional capacity.

The professions should therefore be aligned to a basic code of conduct that strives to provide equitable access to accountable audiology and speech-language pathology services for all people within the contextual realities of the South African population. This implies that the professions should be very closely involved with reigning issues of, for example, poverty and the burden of infectious diseases in South Africa, but within the confines of our professional scope of practice and in terms of the populations which we are mandated to serve. These populations include two categories. Firstly, prevention in the professions encompasses the entire population in efforts to eliminate or minimize risks for, and sequelae of, communication disorders. In this broad category, aspects outside the professional scope impact directly on the effectiveness of prevention, such as poverty which increases risks for communication disorders (Kubba et al., 2004; O'Connor, 2004).

The second population is the sub-set of individuals with a communication disorder for which intervention is provided. In this population many variables in a client's environment influences the intervention at an individual level and professionals need to identify and address these at this level. As professionals we are therefore obliged to engage in issues of social justice and equity only as it relates to our professions at the level of prevention and intervention.

In engaging with these issues Kathard et al. acknowledge the crucial role of research but raise questions regarding the appropriateness of the empirical approach to research, referred to as a '*cultural artifact*', with respect to accomplishing this task. The current body of professional knowledge on which our professions stand is presumed to be biased towards the populations from which this knowledge initially originated, i.e. '*Caucasian, middle-class, monolingual European speakers*'. Whilst it is true that the professions have been dominated by positivist empirical scientific enquiry, and in fact were founded on this very approach, it is important to consider their roles both as a vehicles for addressing current issues in the professions and as probable sources of biased professional knowledge that may not be applicable to the majority of South African populations.

A positivist empirical research paradigm by definition implies a belief that there is objective truth which can be investigated and described by employing sound methods. It is important, however, to distinguish the type of research for which this positivist empirical approach is utilized (Newman, 1997). A basic in contrast to an applied type of research is not influenced by the population it is conducted on or by, and in fact will often not even utilize such samples towards its research ends. Since our professions are based on the accumulation of decades of basic research in the sciences underlying human communication such as anatomy, physiology and acoustics (Maxwell & Satake, 2006), the basic knowledge of our professions should not be influenced by research conducted by or on '*mainly male, urban, middle-class, Judeo-Christian, European language speakers*'.

Applied research, in contrast, is susceptible to bias due to the nature of the study population. This type of research although not necessarily constituting the basic knowledge of our professions certainly constitutes the majority of the research conducted by audiologists and speech-language pathologists and is referred to as professional research. Since these professions are mainly concerned with addressing the challenges of clients, the focus of scientific enquiry is most often on solutions which can be applied immediately (Maxwell & Satake, 2006). However, professional research should also aim to generate an authentic indigenous theoretical base for the professions (de Vos, 2002). Unfortunately, due to the past inequalities of South African healthcare services based on racial distinctions, the knowledge produced by applied research in healthcare professions such as audiology and speech-language pathology has certainly favoured a white cultural and linguistic minority. It is these inequalities, in terms of access to services reflecting the cultural linguistic needs of people in South Africa, which the professions should address by prioritizing services and applied research to previously disadvantaged communities.

To address these reigning inequalities in research for the professions in the multicultural and multilingual South African context it is true that a positivist research paradigm may not be sufficient to describe the complexities of the clients we serve as professionals. A holistic or eclectic approach, which combines positivist and phenomenological research paradigms and applies both quantitative and qualitative methods, may be more

appropriate for the task. A phenomenological, in contrast to a positivist, research paradigm assumes that the world is socially construed and therefore all truth is subjective and relative (Newman, 1997). Combining research along the continuum of the positivist and phenomenological extremes, investigating both abstract and concrete concepts to describe, solve, understand and explore professional practice and client profiles is therefore warranted. This holistic or eclectic approach can provide a richer body of professional knowledge that produces scientific fact within an understanding of the subjective realities of the socio-cultural populations which we serve. It is therefore not a matter of abandoning old methods but rather of embracing new ones alongside traditional research methods. To an increasing extent, this has been a trend in recent studies conducted by the professions in South Africa (Louw & Avenant, 2002; van Dijk, 2003; Swanepoel et al., 2005).

Whilst it is necessary and useful to critically consider the research paradigms to be employed by the professions of audiology and speech-language pathology, on a more practical level it is essential that whatever the research being pursued, it must ultimately be published. Research conducted by our professions in South Africa unfortunately, remains unpublished in the overwhelming majority of cases. A marginal number of publications, and especially international publications, have emerged from the respective fields of audiology and speech-language pathology since the establishment of the professions in South Africa over five decades ago (Swanepoel, 2006). Credence and advocacy for our services rely in large part on the recognition of the research we conduct. This is especially true in an era where evidence-based practice has become a core principle of professional practice. It is therefore of great importance that we not only ensure the use of an holistic paradigm in our research but that we demonstrate the worth of our efforts by bringing them to fruition in the form of internationally recognized peer-reviewed publications. The collective responsibility for establishing world-class research outputs that are locally relevant rests on the profession as a whole, and in particular on the academics and postgraduate students at tertiary institutions for audiology and speech-language pathology.

"Sociopolitical changes have come and gone, but the challenge for the profession has remained the same - to provide accountable services to the entire population based on quality training and contextual research efforts" (Swanepoel, 2006, p.266). Improving the relevance of the research and practice of the professions of audiology and speech-language pathology in South Africa, as argued in response to the issues raised by

Kathard et al., therefore relies on 1) the clear recognition of the professions as sciences reliant on research development; 2) the adherence to basic principles of human dignity and respect for all persons instead of political ideologies; 3) the engagement of social justice and equity in our professional capacity only as these principles relate to scope of practice and the populations which we serve; 4) the utilization of holistic research paradigms by embracing phenomenological methods alongside existing positivist methods; 5) the culmination of research efforts being acknowledged in internationally recognized publications which serve an advocacy function in respect of the professions and the respective services they render to the broader South African population.

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