A COMPARATIVE ANALYSIS OF TEACHER COMPETENCE AND ITS EFFECT ON PUPIL PERFORMANCE IN UPPER PRIMARY SCHOOLS IN MOZAMBIQUE AND OTHER SACMEQ COUNTRIES

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This thesis is dedicated to:

My dearest and lovely granddaughter Thandi Isabel

My husband, Fernando Songane

My lovely daughter, adorable son and son-in-law, Cláudia Isabel, Mário Jorge and Alper José

My dear mother, Isabel Jamba,

My brothers and sister

The memory of my father, Filipe José Passos,

My brothers and sister

and

Sister Maria Isabel Oliveira

and

The Congregation of Mary Presentation
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LIST OF ACRONYMS

CES  Classroom Environment Study
CFPP  Curso de Formação de Professores Primários (Primary Teacher Training Course)
CIDA  Canadian International Development Agency
DANIDA  Danish International Development Agency
DINEB  Direcção Nacional do Ensino Básico (National Directorate for Basic Education)
EFEP  Escola de Formação e Educação de Professores (Teacher Training and Education School)
EP1  Ensino Primário do 1º Grau (Low Primary Education)
EP2  Ensino Primário do 2º Grau (Upper Primary Education)
EHPPE  Escolas de Habilitação de Professores do Posto Escolar (Teacher Training School)
FRELIMO  Frente de Libertação de Moçambique (Mozambique Liberation Front)
FIMS  First International Mathematics Study
GDP  Gross Domestic Product
HDI  Human Development Index
IEA  Evaluation of Educational Achievement
IMAP  Instituto do Magistério Primário (Teacher Training Institute)
IMP  Instituto Médio Pedagógico (Pedagogical Medium Institute)
INE  Instituto Nacional de Estatística (National Institute of Statistics)
INDE  Instituto Nacional do Desenvolvimento de Educação (National Institute for Educational Development)
LLECE  Laboratorio Latinoamericano de Evaluación de la Calide de la Educación (Latin American Laboratory for Assessment of the Quality of Education)
MEC  Ministério da Educação e Cultura (Ministry of Education and Culture)
MINED  Ministry of Education
MPM  Multiple Regression Model
NRC  National Research Co-ordinator
PASEC  Programme d’Analyse des Systèmes Éducatifs de la CONFEMEN (Programme on the Analysis of Education System)
PIRLS  Progress International Reading Literacy Study
PCA  Principal Component Analysis
PISA  Program for International Student Assessment
SES  Socio-Economic Status
SACMEQ  Southern and Eastern Africa Consortium for Monitoring Education Quality
SIMS  Second International Mathematics Study
SIDA  Swedish International Development Authority
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<th>Abbreviation</th>
<th>Full Form</th>
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<tr>
<td>SISS</td>
<td>Second International Science Study</td>
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<tr>
<td>SNE</td>
<td>Sistema Nacional de Educação (National Education System)</td>
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<tr>
<td>TIMSS</td>
<td>Third International Mathematics and Science Study</td>
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<td>UEM</td>
<td>Universidade Eduardo Mondlane (Eduardo Mondlane University)</td>
</tr>
<tr>
<td>UP</td>
<td>Universidade Pedagógica (Pedagogical University)</td>
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<tr>
<td>UNDP</td>
<td>Unit Nations Development Programme</td>
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ABSTRACT

Several cross-national studies, which monitor the quality of education in many countries across the world, have been conducted over the recent years. The International Association for the Evaluation of Educational Achievement (IEA), founded in 1958 by a group of European and American researchers (Grisay and Griffin, 2004), wanted to measure the achievement of comparable samples of students in various subjects and in diverse school systems, with the view of investigating the relationships between possible differences in achievement and differences in inputs, processes and educational contexts.

Since Mozambique’s independence in 1975 there have been many small research studies undertaken by the Ministry of Education and universities, which have not been nationally representative. One exception is a nationally representative study conducted under the auspices of the Southern and Eastern Africa Consortium for Monitoring Educational Quality (SACMEQ) implemented in 2000 and comprising 15 systems of education, namely Botswana, Kenya, Lesotho, Malawi, Mauritius, Mozambique Namibia, Seychelles, South Africa, Swaziland, Tanzania, Uganda, Zambia, Zanzibar and Zimbabwe.

This thesis is a quantitative study and undertakes a secondary analysis using a sample from the SACMEQ database archive collected in 2000 in all countries except Zimbabwe in reading and in mathematics. The Mozambican sample was drawn from 3 177 pupils in 168 schools, while in the SACMEQ study the sample was composed of 41 686 pupils within 2 305 schools. The purpose of this study was to describe and explore the main factors that have an effect on Grade 6 teacher competence and pupil performance in reading and mathematics.

Findings reveal that the relationship between teacher competence and pupil performance in reading and mathematics in upper primary schools in Mozambique, as well as in SACMEQ countries, is influenced by a cognitive domain, an affective domain and a behavioural domain. In addition, teacher competence and pupil performance are affected by many constructs but in this study 10 main predictors related to teacher competence and pupil performance, were identified.

The Cheng and Tsui model (1998) was adopted and adapted as a conceptual framework for this study and findings reveal that for SACMEQ countries as a whole, the data in some way is consistent with the adapted model and fill two domains, namely cognitive and behavioural within the following six constructs: teacher training, teacher characteristics, internal and external teaching
context, pre-existing pupils’ characteristics and parent and community involvement. However, no individual country is completely consistent with the adapted model.

This study, taking into account the role of the teacher on pupil performance, as emphasized by many researchers such as Chapman and Mählck (1997), Châu (1996), Darling-Hammond (1999) and Kanu (1996), is intended to be a modest contribution for the Ministries of Education in SACMEQ countries although it has particular reference for the Ministry of Education and Culture in Mozambique. For instance, on the one hand, the Ministry has conducted few studies in upper primary schools related to the pupil and teacher performance and, on the other hand, Mozambique as a Portuguese speaking country, has a unique history, tradition and system of education which differs from that of the other participating countries.

The SACMEQ studies have provided valid and reliable data on which important decisions could be based. Specifically, SACMEQ II provided relevant, high quality data about the academic profile of teachers, the level of performance in the areas assessed, school management and other aspects that are relevant for policymaking. A comparative analysis, using such a cross-national study, is important for the Ministry of Education and Culture in order to have an overview of the performance of teachers and pupils in other school systems within the SACMEQ countries. By identifying the weaknesses and the strengths in each system, all SACMEQ countries can learn from one another. However, the results of this analysis should be used with caution, taking into consideration the history, location, economy and culture of each country.

Within the educational context of the region, many benefits are also apparent. The data collected through SACMEQ II can be considered to be of extreme importance for Mozambique’s education system, since it provides the country with important data to promote a reflection on its primary education sector, to identify the position of Mozambique’s education system within the region, and to work towards its improvement.
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